

NORTHEAST UTILITIES

THE CONNECTICUT LIGHT AND POWER COMPANY
WESTERN MASSACHUSETTS ELECTRIC COMPANY
MILFORD WATER PLANT COMPANY
NORTHEAST UTILITIES SERVICE COMPANY
NORTHEAST NUCLEAR ENERGY COMPANY

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January 6, 1993

Docket Nos. 50-213

50-245

50-336

50-423

814323

Mr. John R. Jolicoeur
Incident Response Branch
U.S. Nuclear Regulatory Commission
Maryland National Bank Building
7735 Old Georgetown Road
Bethesda, MD 20814

Dear Mr. Jolicoeur:

Haddam Neck Plant
Millstone Nuclear Power Station, Unit Nos. 1, 2, and 3
Emergency Response Data System Submittal of Data Point Library

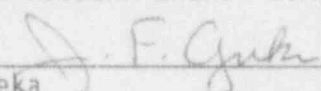
In accordance with 10CFR50, Appendix E, Section VI, Northeast Nuclear Energy Company and Connecticut Yankee Atomic Power Company hereby provide you with updated information pertaining to the Emergency Response Data System (ERDS).

Attachment Nos. 1 through 4 include the updated Data Point Library (DPL) for Millstone Unit Nos. 1, 2, and 3 and the Haddam Neck Plant, respectively. The DPL lists the data points that will be transmitted for ERDS. This update to ERDS will incorporate changes identified during system testing performed with the NRC's contractor, Halliburton NUS.

If you have any questions, please contact us.

Very truly yours,

CONNECTICUT YANKEE ATOMIC POWER COMPANY
NORTHEAST NUCLEAR ENERGY COMPANY


J. F. Opeka
Executive Vice President

Attachment

cc: See Page 2

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PDR ADOCK 05000213
F PDR

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Mr. John R. Jolicoeur
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January 6, 1993

cc: U.S. NRC, Attention: Document Control Desk, Washington, DC 20555
T. T. Martin, Region I Administrator
A. B. Wang, NRC Project Manager, Haddam Neck Plant
J. W. Andersen, NRC Acting Project Manager, Millstone Unit No. 1
G. S. Vissing, NRC Project Manager, Millstone Unit No. 2
V. L. Rooney, NRC Project Manager, Millstone Unit No. 3
D. H. Jaffe, NRC Project Manager, Millstone Station
W. J. Raymond, Senior Resident Inspector, Haddam Neck Plant
P. D. Swetland, Senior Resident Inspector, Millstone Unit Nos. 1, 2,
and 3
T. P. LaRosa, NUS Corp.

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Attachment No. 1

Data Point Library (DPL) for
Millstone Unit No. 1

January 1993

DATA POINT LIBRARY REFERENCE FILE

Date:	06/03/92
Reactor Unit:	MS1
Data Feeder:	N/A
ERDS Parameter:	NI POWER RNG
Point Id:	C51C0010
Site Desc:	REACTOR POWER
ERDS Desc:	NUCLEAR INSTRUMENTS. POWER RANGE
Analog/Digital:	A
Engr. Units:	%
Units Conv:	
Minimum Instr Range	0
Maximum Instr Range	125
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	P
Number of Sensors:	106
How Processed:	SPDS VALIDATED AVERAGE
Sensor Loc:	INCORE NEUTRON DETECTORS
Alarm/Trip Set Points:	VARIABLE SCRAM SIGNAL FROM APRM SYSTEM
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-On Power Level:	N/A
Instrument Failure Mode:	LOW
Temperature Compensation for DP Transmitters:	N
Level Reference Leg:	N/A
System Desc:	REACTOR NUCLEAR POWER. FULL RANGE AN AVERAGE OF THE SIX APRM's ADJUSTED WITH A GAIN ADJUSTMENT FACTOR TO ENSURE THE APRM VALUE ACCURATELY REFLECTS CORE THERMAL POWER SCRAM SIGNAL IS FROM 62 - 120 % BIASED BY % RECIRC LOOP FLOW

DATA POINT LIBRARY REFERENCE FILE

Date: 06/03/92
 Reactor Unit: MS1
 Data Feeder: N/A
 ERDS Parameter: REAC VES LEV
 Point Id: B21C0110
 Site Desc: WR RPV LEVEL
 ERDS Desc: REACTOR VESSEL WATER LEVEL
 Analog/Digital: A
 Engr. Units: IN
 Units Conv:
 Minimum Instr Range -340
 Maximum Instr Range 316
 Zero Point Ref: TAF
 Ref. Notes: TOP OF ACTIVE FUEL
 Proc or Sens: P
 Number of Sensors: 1
 How Processed: TEMP/PRESS COMP LEVEL
 Sensor Loc: VARIOUS
 Alarm/Trip Set Points: VARIOUS
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode:
 Temperature Compensation
 for DP Transmitters: Y
 Level Reference Leg: WET
 System Desc: RPV LEVEL FROM SPDS LOGIC TO COMPENSATE FOR CORE FLOW AND
 TEMPERATURE/DENSITY CONDITIONS. STATUS OF REACTOR RE-
 CIRCULATION PUMPS STATUS AND REFERENCE LEG TEMPERATURE IS
 DONE BY THIS LOGIC.

DATA POINT LIBRARY REFERENCE FILE

Date:	06/03/92
Reactor Unit:	MS1
Data Feeder:	N/A
ERDS Parameter:	MAIN FD FLOW
Point Id:	DPT-640-40A
Site Desc:	FEEDWATER FLOW
ERDS Desc:	FEEDWATER FLOW INTO THE REACTOR
Analog/Digital:	A
Engr. Units:	MLB/HR
Units Conv:	
Minimum Instr Range	0
Maximum Instr Range	5
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	S
Number of Sensors:	1
How Processed:	SQUARE ROOT EXTRACTION SIGNAL FROM DP
Sensor Loc:	FEED LINE
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-On Power Level:	N/A
Instrument Failure Mode:	FAIL LOW
Temperature Compensation for DP Transmitters:	Y
Level Reference Leg:	N/A
System Desc:	FEEDWATER FLOW

DATA POINT LIBRARY REFERENCE FILE

Date: 06/03/92
 Reactor Unit: MS1
 Data Feeder: N/A
 ERDS Parameter: RCS PRESSURE
 Point Id: B21C0210
 Site Desc: RPV PRESSURE
 ERDS Desc: REACTOR COOLANT SYSTEM PRESSURE
 Analog/Digital: A
 Engr. Units: PSIG
 Units Conv:
 Minimum Instr Range 0
 Maximum Instr Range 2500
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens: P
 Number of Sensors: 2
 How Processed: SPDS CALC VALUE
 Sensor Loc: RCS
 Alarm/Trip Set Points:
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode:
 Temperature Compensation
 for DP Transmitters:
 Level Reference Leg: N/A
 System Desc: SPDS LOGIC RCS PRESSURE SIGNAL

DATA POINT LIBRARY REFERENCE FILE

Date:	11/20/92
Reactor Unit:	MS1
Data Feeder:	N/A
ERDS Parameters:	LPCI FLOW
Point Id:	FI-1540-11A
Site Desc:	LPCI FLOW TRAIN A
ERDS Desc:	LOW PRESSURE COOLANT INJ. FLOW
Analog/Digital:	A
Engr. Units:	KBPM
Units Conv:	
Minimum Instr Range	0
Maximum Instr Range	18
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	S
Number of Sensors:	1
How Processed:	
Sensor Loc:	LPCI SYSTEM TRAIN A
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-On Power Level:	N/A
Instrument Failure Mode:	
Temperature Compensation for DP Transmitters:	
Level Reference Leg:	N/A
System Desc:	LPCI FLOW TRAIN A

DATA POINT LIBRARY REFERENCE FILE

Date: 06/03/92
 Reactor Unit: MS1
 Data Feeder: N/A
 ERDS Parameter: EFF GAS RAD
 Point Id: RM1705-19A
 Site Desc: STACK GAS RADIATION HIGH
 ERDS Desc: RADIOACTIVITY OF RELEASED GASSES
 Analog/Digital: A
 Engr. Units: uCi/CC
 Units Conv:
 Minimum Instr Range E-3
 Maximum Instr Range E+5
 Zero-Point Ref:
 Ref. Notes:
 Proc or Sens: S
 Number of Sensors: 2
 How Processed:
 Sensor Loc: OF LINE SAMPLE - BASE OF STACK
 Alarm/Trip Set Points: 0.1 uCi/CC
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode: LOW
 Temperature Compensation
 for DP Transmitters:
 Level Reference Leg: N/A
 System Desc: RADIATION MONITORING FOR GASSES FROM ALL THREE MILLSTONE
 STATION NUCLEAR PLANTS.
 STATED RANGE IS BASED ON Xe-133.

DATA POINT LIBRARY REFERENCE FILE

Date: 06/03/92
 Reactor Unit: MS1
 Data Feeder: N/A
 ERDS Parameter: DW PRESS
 Point Id: PT-1601-42
 Site Desc: DRYWELL PRESSURE (WR)
 ERDS Desc: DRYWELL PRESSURE
 Analog/Digital: A
 Engr. Units: PSIG
 Units Conv:
 Minimum Instr Range 0
 Maximum Instr Range 80
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens: S
 Number of Sensors: 1
 How Processed:
 Sensor Loc: DRY WELL
 Alarm/Trip Set Points:
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode:
 Temperature Compensation
 for DP Transmitters:
 Level Reference Leg: N/A
 System Desc: DRY WELL PRESSURE SIGNAL

DATA POINT LIBRARY REFERENCE FILE

Date: 06/03/92
 Reactor Unit: MS1
 Data Feeder: N/A
 ERDS Parameter: DW TEMP
 Point Id: D23C0310
 Site Desc: DRYWELL TEMPERATURE
 ERDS Desc: DRYWELL TEMPERATURE
 Analog/Digital: A
 Engr. Units: DEGF
 Units Conv:
 Minimum Instr Range 40
 Maximum Instr Range 440
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens: P
 Number of Sensors: 8
 How Processed: VALIDATED AVERAGE
 Sensor Loc: VARIOUS DRYWELL LOCATIONS
 Alarm/Trip Set Points:
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode:
 Temperature Compensation
 for DP Transmitters:
 Level Reference Leg: N/A
 System Desc: AVERAGE DRY WELL TEMPERATURE

DATA POINT LIBRARY REFERENCE FILE

Date:	11/17/92
Reactor Unit:	MS1
Data Feeder:	N/A
ERDS Parameter:	SP LEVEL
Point Id:	G43C0010
Site Desc:	SUPPRESSION POOL WATER LEVEL
ERDS Desc:	SUPPRESSION POOL WATER LEVEL
Analog/Digital:	A
Engr. Units:	FT
Units Conv:	
Minimum Instr Range	2.2
Maximum Instr Range	27.2
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	S
Number of Sensors:	1
How Processed:	
Sensor Loc:	
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-On Power Level:	N/A
Instrument Failure Mode:	
Temperature Compensation for DP Transmitters:	Y
Level Reference Leg:	DRY
System Desc:	SUPPRESSION POOL WATER LEVEL

DATA POINT LIBRARY REFERENCE FILE

Date: 11/17/92
 Reactor Unit: MS1
 Data Feeder: N/A
 ERDS Parameter: H2 CONC
 Point Id: DRY804
 Site Desc: CONTAINMENT H2
 ERDS Desc: DRYWELL OR TORUS HYDROGEN CONC.
 Analog/Digital: D
 Engr. Units:
 Units Conv: DIGITAL POINT SEE NOTE
 Minimum Instr Range
 Maximum Instr Range
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens: S
 Number of Sensors: 1
 How Processed:
 Sensor Loc:
 Alarm/Trip Set Points:
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode:
 Temperature Compensation
 for DP Transmitters: Y
 Level Reference Leg: N/A
 System Desc: THERMAL CONDUCTIVITY TYPE H2 MONITOR
 DIGITAL POINT: 1 = NORMAL
 0 = ALARM

DATA POINT LIBRARY REFERENCE FILE

Date: 11/17/92
 Reactor Unit: MS1
 Data Feeder: N/A
 ERDS Parameter: O2 CONC
 Point Id: DRY806
 Site Desc: CONTAINMENT O2
 ERDS Desc: DRYWELL OR TORUS OXYGEN CONC.
 Analog/Digital: D
 Engr. Units:
 Units Conv: DIGITAL POINT SEE NOTE
 Minimum Instr Range
 Maximum Instr Range
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens: S
 Number of Sensors: 1
 How Processed:
 Sensor Loc:
 Alarm/Trip Set Point: ALARM ABOVE 4%
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode:
 Temperature Compensation
 for DP Transmitters: Y
 Level Reference Leg: N/A
 System Desc: THERMAL CONDUCTIVITY O2 MONITOR
 DIGITAL POINT: 1 = NORMAL
 0 = ALARM

DATA POINT LIBRARY REFERENCE FILE

Date: 11/17/92
 Reactor Unit: MS1
 Data Feeder: N/A
 ERDS Parameter: CST LEVEL
 Point Id: LT7-50
 Site Desc: CTS LEVEL
 ERDS Desc: CONDENSATE STORAGE TANK LEVEL
 Analog/Digital: A
 Engr. Units: %
 Units Conv: 0 - 100% = 0 - 572 IN = 0 - 400,000 GAL
 Minimum Instr Range: 0
 Maximum Instr Range: 100
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens: S
 Number of Sensors: 1
 How Processed:
 Sensor Loc:
 Alarm/Trip Set Points: ALARMS: HI = 98% LO = 62.3%
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode:
 Temperature Compensation
 for DP Transmitters: N
 Level Reference Leg: WET
 System Desc: LEVEL SIGNAL FOR CST
 TECH SPEC LOW LIMIT = 225,000 GAL
 LOW LEVEL ALARM (62.3%) = 287,000 GAL

DATA POINT LIBRARY REFERENCE FILE

Date: 06/03/92
 Reactor Unit: MS1
 Data Feeder: N/A
 ERDS Parameter: WIND SPEED
 Point Id: WS142
 Site Desc: WIND SPEED (142 FEET)
 ERDS Desc: WIND SPEED AT THE REACTOR SITE
 Analog/Digital: A
 Engr. Units: MPH
 Units Conv:
 Minimum Instr Range 0
 Maximum Instr Range 100
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens: S
 Number of Sensors: 1
 How Processed:
 Sensor Loc: STATION MET TOWER
 Alarm/Trip Set Points: NONE
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode:
 Temperature Compensation
 for DP Transmitters: N
 Level Reference Leg: N/A
 System Desc: INSTANTANEOUS WIND SPEED SIGNAL DIRECT FROM SENSOR ON MET
 TOWER. NO AVERAGING DONE ON THIS SIGNAL

DATA POINT LIBRARY REFERENCE FILE

Date:	11/17/92
Reactor Unit:	MS1
Data Feeder:	N/A
ERDS Parameter:	WIND DIR
Point Id:	WD142
Site Desc:	WIND DIRECTION (142 FEET)
ERDS Desc:	WIND DIRECTION AT THE STATION
Analog/Digital:	A
Engr. Units:	DEG
Units Conv:	
Minimum Instr Range	0
Maximum Instr Range	540
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	S
Number of Sensors:	1
How Processed	
Sensor Loc:	STATION MET TOWER
Alarm/Trip Set Points:	NONE
NI Detector Power Supply Cut-Off Power Level	N/A
NI Detector Power Supply Turn-On Power Level:	N/A
Instrument Failure Mode:	
Temperature Compensation for DP Transmitters:	N
Level Reference Leg:	N/A
System Desc:	INSTANTANEOUS SIGNAL FROM MET TOWER INSTRUMENT RANGE IS 0 TO 540 DEGREES VALUES OVER 360 ARE WRAP AROUND VALUES AND SHOULD HAVE 360 SUBTRACTED FROM THEM FOR ACTUAL DIRECTION. NO AVERAGING IS DONE ON THIS SIGNAL THE WIND IS FROM THE INDICATED DIRECTION

DATA POINT LIBRARY REFERENCE FILE

Date: 06/11/92
 Reactor Unit: MS1
 Data Feeder: N/A
 ERDS Parameter: STAB CLASS
 Point Id: DT142
 Site Desc: DELTA TEMP(142 FT)
 ERDS Desc: AIR STABILITY AT REACTOR SITE
 Analog/Digital: A
 Engr. Units: DEGF
 Units Conv:
 Minimum Instr Range -10
 Maximum Instr Range 18
 Zero Point Ref: 0
 Ref. Notes: 0 INDICATES NO DELTA BETWEEN THE TWO
 Proc or Sens: P
 Number of Sensors: 2
 How Processed: DELTA TEMP BETWEEN 142 AND 33 FT TEMPS
 Sensor Loc: STATION MET TOWER
 Alarm/Trip Set Points:
 NI Detector Power Supply
 Cut-Off Power Level:
 NI Detector Power Supply
 Turn-On Power Level:
 Instrument Failure Mode:
 Temperature Compensation
 for DP Transmitters: N
 Level Reference Leg: N/A
 System Desc: INSTANTANEOUS DIFFERENCE BETWEEN THE 33 FOOT AND 142 FOOT
 MET TOWER TEMPERATURES. THIS IS THE ONLY AIR STABILITY
 TYPE SIGNALS AVAILABLE TO THE PLANT COMPUTER.

DATA POINT LIBRARY REFERENCE FILE

Date: 10/14/92
 Reactor Unit: MS1
 Data Feeder: N/A
 ERDS Parameter: CR SPRAY FL
 Point Id: FI-1450-4A
 Site Desc: CORE SPRAY FLOW
 ERDS Desc: CORE SPRAY COOLING SYSTEM FLOW
 Analog/Digital: A
 Engr. Units: GPM
 Units Conv:
 Minimum Instr Range 0
 Maximum Instr Range 6000
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens. S
 Number of Sensors: 1
 How Processed:
 Sensor Loc:
 Alarm/Trip Set Points:
 NI Detector Power Supply
 Cut-Off Power Level:
 NI Detector Power Supply
 Turn-On Power Level:
 Instrument Failure Mode: LOW
 Temperature Compensation
 for DP Transmitters: N
 Level Reference Leg:
 System Desc: FLOW INSTRUMENTATION FOR CORE SPRAY COOLING SYSTEM
 FOR TRAIN A

DATA POINT LIBRARY REFERENCE FILE

Date: 10/14/92
 Reactor Unit: M31
 Data Feeder: N/A
 ERDS Parameter: MN STEAM RAD
 Point Id: 590-106A
 Site Desc: MAIN STEAM LINE RAD
 ERDS Desc: RADIATION LEVEL-MAIN STEAM LINE
 Analog/Digital: D
 Engr. Units:
 Units Conv: DIGITAL POINT - SEE NOTE
 Minimum Instr Range
 Maximum Instr Range
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens: S
 Number of Sensors: 1
 How Processed:
 Sensor Loc: 8 FEET FROM STEAM LINES
 Alarm/Trip Set Points: HIGH VARIES BASED ON NORMAL READINGS
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode: ALARM
 Temperature Compensation
 for DP Transmitters: N
 Level Reference Leg: N/A
 System Desc: RADIATION ALARM FROM MAIN STEAM LINES. ALARM IS 3X BACKGROUND
 NORMAL BACKGROUND IS 250-300 mR/HR AT 100% POWER
 NO QUANTIFICATION IS ATTEMPTED FROM THIS MONITOR
 ALARM COULD INDICATE HIGHER N-16 LEVELS OR FAILED
 FUEL.
 DIGITAL POINT: 1 = NORMAL
 0 = ALARM

DATA POINT LIBRARY REFERENCE FILE

Date: 10/14/92
 Reactor Unit: MS1
 Data Feeder: N/A
 ERDS Parameter: SP TEMP
 Point Id: D23C0210
 Site Desc: SUPPRESSION POOL TEMPERATURE
 ERDS Desc: SUPPRESSION POOL TEMPERATURE
 Analog/Digital: A
 Engr. Units: DEGF
 Units Conv:
 Minimum Instr Range 0
 Maximum Instr Range 300
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens: F
 Number of Sensors: 4
 How Processed: VALIDATED AVERAGE
 Sensor Loc:
 Alarm/Trip Set Points:
 NI Detector Power Supply
 Cut-Off Power Level:
 NI Detector Power Supply
 Turn-On Power Level:
 Instrument Failure Mode: LOW
 Temperature Compensation
 for DP Transmitters: N
 Level Reference Leg: N/A
 System Desc: TEMPERATURE OF THE SUPPRESSION POOL

DATA POINT LIBRARY REFERENCE FILE

Date: 10/14/92
 Reactor Unit: MS1
 Data Feeder: N/A
 ERDS Parameter: CR SPRAY FL
 Point Id: FI-1450-4B
 Site Desc: CORE SPRAY FLOW
 ERDS Desc: CORE SPRAY COOLING SYSTEM FLOW
 Analog/Digital: A
 Engr. Units: GPM
 Units Conv:
 Minimum Instr Range 0
 Maximum Instr Range 6000
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens: S
 Number of Sensors: 1
 How Processed:
 Sensor Loc:
 Alarm/Trip Set Points:
 NI Detector Power Supply
 Cut-Off Power Level:
 NI Detector Power Supply
 Turn-On Power Level:
 Instrument Failure Mode: LOW
 Temperature Compensation
 for DP Transmitters: N
 Level Reference Leg:
 System Desc: FLOW INSTRUMENTATION FOR CORE SPRAY COOLING SYSTEM
 FOR TRAIN B

DATA POINT LIBRARY REFERENCE FILE

Date:	11/20/92
Reactor Unit:	MS1
Data Feeder:	N/A
ERDS Parameter:	LPCI FLOW
Point Id:	FI-1540-11B
Site Desc:	LPCI FLOW TRAIN B
ERDS Desc:	LOW PRESSURE COOLANT INJ. FLOW
Analog/Digital:	A
Engr. Units:	KGPM
Units Conv:	
Minimum Instr Range	0
Maximum Instr Range	18
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	S
Number of Sensors:	1
How Processed:	
Sensor Loc:	LPCI SYSTEM TRAIN B
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-On Power Level:	N/A
Instrument Failure Mode:	
Temperature Compensation for DP Transmitters:	
Level Reference Leg:	N/A
System Desc:	LPCI FLOW TRAIN B

DATA POINT LIBRARY REFERENCE FILE

Date: 11/17/92
 Reactor Unit: MS1
 Data Feeder: N/A
 ERDS Parameter: DW RAD
 Point Id: RIT-1825
 Site Desc: CTMT RADIATION
 ERDS Desc: RADIATION LEVEL IN THE DRYWELL
 Analog/Digital: A
 Engr. Units: R/HR
 Units Conv:
 Minimum Instr Range 1
 Maximum Instr Range 1 E+8
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens: S
 Number of Sensors: 1
 How Processed:
 Sensor Loc: DRYWELL
 Alarm/Trip Set Points:
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode: LOW
 Temperature Compensation
 for DP Transmitters:
 Level Reference Leg: N/A
 System Desc: RADIATION LEVEL IN THE DRYWELL

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Attachment No. 2

Data Point Library (DPL) for
Millstone Unit No. 2

January 1993

Date 4/8/92	Reactor Unit MS2	Data Feeder N/A
NRC ERDS Parameter	NI POWER RNG	
Point ID	RXPWR	
Plant Spec Point Desc.	REACTOR POWER	
Generic Condensed Desc.	Nuclear Instruments, Power Range	
Analog Digital	A	
Engr Units Dig States	%	
Engr Units Conversion	N/A	
Min Instrument Range	E-8	
Max Instrument Range	150	
Zero Point Reference	N/A	
Reference Point Notes	N/A	
PROC SENS	P	
Number of Sensors	12	
How Processed	Validated Average	
Sensor Locations	Containment	
Alarm Trip Setpoints		
NI Det. PS Cut Off Pwr Lvl	N/A	
NI Det. PS Turn On Pwr Lvl	N/A	
Instrument Fail. Mode	LOW	
Temp. Comp. for DP Xmtrs	N	
Level Reference Leg	N/A	
Unique System Desc.	Source Range, Wide Range and Power Range nuclear instrumentation channels signals are monitored and validated to provide indicated reactor power.	

Date 4/8/92

Reactor Unit MS2

Data Feeder N/A

NRC ERDS Parameter NI INTER RNG

Point ID N/A

Plant Spec Point Desc.

Generic|Condensed Desc. Nuclear Instruments, Intermediate Range

Analog|Digital A

Engr Units|Dig States

Engr Units Conversion N/A

Min Instrument Range

Max Instrument Range

Zero Point Reference N/A

Reference Point Notes N/A

PROC | SENS

Number of Sensors

How Processed

Sensor Locations

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode

Temp. Comp. for DP Xmtrs N

Level Reference Leg

Unique System Desc.

Date 4/8/92

Reactor Unit MS2

Data Feeder N/A

NRC ERDS Parameter NI SOURC RNG

Point ID N/A

Plant Spec Point Desc.

Generic|Condensed Desc. Nuclear Instruments, Source Range

Analog|Digital A

Engr Units|Dig States

Engr Units Conversion N/A

Min Instrument Range

Max Instrument Range

Zero Point Reference N/A

Reference Point Notes N/A

PROC | SENS

Number of Sensors

How Processed

Sensor Locations

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det PS Turn On Pwr Lvl N/A

Instrument Fail. Mode

Temp. Comp. for DP Xmtrs N

Level Reference Leg

Unique System Desc.

Date 4/8/92

Reactor Unit MS2

Data Feeder N/A

NRC ERDS Parameter REAC VES LEV

Point ID HDLEV-A

Plant Spec Point Desc. REACTOR VESSEL LEVEL

Generic|Condensed Desc. Reactor Vessel Water Level

Analog|Digital A

Engr Units|Dig States %

Engr Units Conversion See Description

Min Instrument Range 0

Max Instrument Range 100

Zero Point Reference Other

Reference Point Notes Top of Fuel Alignment Plate

PROC | SENS P

Number of Sensors 8

How Processed Other-

Sensor Locations Containment

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fall. Mode Various

Temp. Comp. for DP Xmtrs N

Level Reference Leg N/A

Unique System Desc. Eight Heated Junction Thermocouple sensors provide covered/uncovered indication.

Sensor 1 2 3 4 5 6 7 8

Percent 100 80 61 43 29 19 12 7

Inches 186 144 108 72 51 30 20 10

Top of Active Fuel is 25" below point 8.

Date 4/8/92

Reactor Unit MS2

Data Feeder N/A

NRC ERDS Parameter TEMP CORE EX

Point ID INTAMX

Plant Spec Point Desc. MAX REGION AVG TEMP

Generic|Condensed Desc. Highest Temperature at the Core Exit

Analog|Digital A

Engr Units|Dig States DEG F

Engr Units Conversion N/A

Min Instrument Range 200

Max Instrument Range 2300

Zero Point Reference N/A

Reference Point Notes N/A

PROC | SENS P

Number of Sensors 45

How Processed Validated Highest

Sensor Locations Containment

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode

Temp. Comp. for DP Xmtrs N

Level Reference Leg N/A

Unique System Desc.

Date 4/8/92

Reactor Unit MS2

Data Feeder N/A

ARC ERDS Parameter SUB MARGIN

Point ID MINSUB

Plant Spec Point Desc. MIN. RCS SUBCOOLING

Generic|Condensed Desc. Saturation Temperature—Highest CET

Analog|Digital A

Engr Units|Dig States DEGF

Engr Units Conversion N/A

Min Instrument Range 0

Max Instrument Range 700

Zero Point Reference N/A

Reference Point Notes N/A

PROC | SENS P

Number of Sensors 45

How Processed Highest

Sensor Locations Containment

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode

Temp. Comp. for DP Xmtrs N

Level Reference Leg N/A

Unique System Desc.

Date 4/8/92	Reactor Unit MS2	Data Feeder N/A
NRC ERDS Parameter	CORE FLOW	
Point ID	CVRCSF	
Plant Spec Point Desc.	Total RCS Flow	
Generic Condensed Desc.	Total Reactor Coolant Flow	
Analog Digital	A	
Engr Units Dig States	MLB/HR	
Engr Units Conversion	N/A	
Min instrument Range	0	
Max Instrument Range	150	
Zero Point Reference	N/A	
Reference Point Notes	N/A	
PROC SENS	P	
Number of Sensors	8	
How Processed	Sum of Validated Average	
Sensor Locations	Containment	
Alarm Trip Setpoints		
NI Det. PS Cut Off Pwr Lvl	N/A	
NI Det. PS Turn On Pwr Lvl	N/A	
Instrument Fail. Mode	LOW	
Temp. Comp. for DP Xmtrs	N	
Level Reference Leg	N/A	
Unique System Desc.	Validated average for RCS loop 1 is based on sensor inputs PD111A, B, C, D. Validated average for RCS loop 2 is based on sensor inputs PD121A, B, C, D. Total RCS Flow is the sum of the validated loop averages	

Date 4/8/92

Reactor Unit MS2

Data Feeder N/A

NRC ERDS Parameter SG LEVEL 1/A

Point ID SG1LVL

Plant Spec Point Desc. STEAM GEN 1 LEVEL

Generic|Condensed Desc. Steam Generator 1 (or A) Water Level

Analog|Digital A

Engr Units|Dig States %

Engr Units Conversion Approx 1.8 inches per %

Min Instrument Range 0

Max Instrument Range 100

Zero Point Reference Other

Reference Point Notes Reference to narrow range lower instrument tap.

PROC | SENS P

Number of Sensors 4

How Processed Validated Average

Sensor Locations Containment

Alarm|Trip Setpoints LO:50.4

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode LOW

Temp. Comp. for DP Xmtrs N

Level Reference Leg WET

Unique System Desc. Steam Generator Level Narrow Range calibrated for hot full power conditions. Top of the U-tubes is at = 7.4% indicated level.

Date	4/8/92	Reactor Unit	MS2	Data Feeder	N/A
NRC ERDS Parameter	SG LEVEL 2/B				
Point ID	SG2LVL				
Plant Spec Point Desc.	STEAM GEN 2 LEVEL				
Generic Condensed Desc.	Steam Generator 2 (or B) Water Level				
Analog Digital	A				
Engr Units Dig States	%				
Engr Units Conversion	Approx 1.8 inches per %				
Min Instrument Range	0				
Max Instrument Range	100				
Zero Point Reference	Other				
Reference Point Notes	Reference to narrow range lower instrument tap.				
PROC SENS	P				
Number of Sensors	4				
How Processed	Validated Average				
Sensor Locations	Containment				
Alarm Trip Setpoints	LO:50.4				
NI Det. PS Cut Off Pwr Lvl	N/A				
NI Det. PS Turn On Pwr Lvl	N/A				
Instrument Fail. Mode	LOW				
Temp. Comp. for DP Xmtrs	N				
Level Reference Leg	WET				
Unique System Desc.	Steam Generator Level Narrow Range calibrated for hot full power conditions. Top of the U-tubes is at \approx 7.4% indicated level.				

Date	4/8/92	Reactor Unit	MS2	Data Feeder	N/A
NRC ERDS Parameter	SG LEVEL 3/C				
Point ID	N/A				
Plant Spec Point Desc.					
Generic Condensed Desc.	Steam Generator 3 (or C) Water Level				
Analog Digital	A				
Engr Units Dig States					
Engr Units Conversion	N/A				
Min Instrument Range					
Max Instrument Range					
Zero Point Reference	N/A				
Reference Point Notes	N/A				
PROC SENS					
Number of Sensors					
How Processed					
Sensor Locations					
Alarm Trip Setpoints					
NI Det. PS Cut Off Pwr Lvl	N/A				
NI Det. PS Turn On Pwr Lvl	N/A				
Instrument Fail. Mode					
Temp. Comp. for DP Xmtrs	N				
Level Reference Leg					
Unique System Desc.					

Date 4/8/92

Reactor Unit MS2

Data Feeder N/A

NRC ERDS Parameter SG LEVEL 4/D

Point ID N/A

Plant Spec Point Desc.

Generic|Condensed Desc. Steam Generator 4 (or D) Water Level

Analog|Digital A

Engr Units|Dig States

Engr Units Conversion N/A

Min Instrument Range

Max Instrument Range

Zero Point Reference N/A

Reference Point Notes N/A

PROC | SENS

Number of Sensors

How Processed

Sensor Locations

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode

Temp. Comp. for DP Xmtrs N

Level Reference Leg

Unique System Desc.

Date 4/8/92

Reactor Unit MS2

Data Feeder N/A

NRC ERDS Parameter SG PRESS 1/A

Point ID SG1PR

Plant Spec Point Desc. STEAM GEN 1 PRESSURE

Generic|Condensed Desc. Steam Generator 1 (or A) Pressure

Analog|Digital A

Engr Units|Dig States PSIA

Engr Units Conversion N/A

Min Instrument Range 0

Max Instrument Range 1000

Zero Point Reference N/A

Reference Point Notes N/A

PROC | SENS P

Number of Sensors 4

How Processed Validated Average

Sensor Locations Containment

Alarm|Trip Setpoints LO:520

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode LOW

Temp. Comp. for DP Xmtrs N

Level Reference Leg N/A

Unique System Desc. Steam Generator Pressure

Date 4/8/92	Reactor Unit MS2	Data Feeder N/A
NRC ERDS Parameter	SG PRESS 2/B	
Point ID	SG2PR	
Plant Spec Point Desc.	STEAM GEN 2 PRESSURE	
Generic Condensed Desc.	Steam Generator 2 (or B) Pressure	
Analog Digital	A	
Engr Units Dig States	PSIA	
Engr Units Conversion	N/A	
Min Instrument Range	0	
Max Instrument Range	1000	
Zero Point Reference	N/A	
Reference Point Notes	N/A	
PROC SENS	P	
Number of Sensors	4	
How Processed	Validated Average	
Sensor Locations	Containment	
Alarm Trip Setpoints	LO:520	
NI Det. PS Cut Off Pwr Lvl	N/A	
NI Det. PS Turn On Pwr Lvl	N/A	
Instrument Fail. Mode	LOW	
Temp. Comp. for DP Xmtrs	N	
Level Reference Leg	N/A	
Unique System Desc.	Steam Generator Pressure	

Date 4/8/92

Reactor Unit MS2

Data Feeder N/A

NRC ERDS Parameter SG PRESS 3/C

Point ID N/A

Plant Spec Point Desc.

Generic|Condensed Desc. Steam Generator 3 (or C) Pressure

Analog|Digital A

Engr Units|Dig States

Engr Units Conversion N/A

Min Instrument Range

Max Instrument Range

Zero Point Reference N/A

Reference Point Notes N/A

PROC | SENS

Number of Sensors

How Processed

Sensor Locations

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fall. Mode

Temp. Comp. for DP Xmtrs N

Level Reference Leg

Unique System Desc.

Date 4/8/92

Reactor Unit MS2

Data Feeder N/A

NRC ERDS Parameter SG PRESS 4/D

Point ID N/A

Plant Spec Point Desc.

Generic|Condensed Desc. Steam Generator 4 (or D) Pressure

Analog|Digital A

Engr Units|Dig States

Engr Units Conversion N/A

Min Instrument Range

Max Instrument Range

Zero Point Reference N/A

Reference Point Notes N/A

PROC | SENS

Number of Sensors

How Processed

Sensor Locations

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode

Temp. Comp. for DP Xmtrs N

Level Reference Leg

Unique System Desc.

Date	4/8/92	Reactor Unit	MS2	Data Feeder	N/A
NRC ERDS Parameter	MN FD FL 1/A				
Point ID	F5268				
Plant Spec Point Desc.	SG1 MAIN FW FLOW				
Generic Condensed Desc.	Stm Gen 1 (or A) Main Feedwater Flow				
Analog Digital	A				
Engr Units Dig States	Klb/hr				
Engr Units Conversion	N/A				
Min Instrument Range	0				
Max Instrument Range	6300				
Zero Point Reference	N/A				
Reference Point Notes	N/A				
PROC SENS	S				
Number of Sensors	1				
How Processed					
Sensor Locations	Turbine Building				
Alarm Trip Setpoints					
NI Det. PS Cut Off Pwr Lvl	N/A				
NI Det. PS Turn On Pwr Lvl	N/A				
Instrument Fail. Mode	LOW				
Temp. Comp. for DP Xmtrs	N				
Level Reference Leg	N/A				
Unique System Desc.	Main Feedwater Flow				

Date	4/8/92	Reactor Unit	MS2	Data Feeder	N/A
NRC ERDS Parameter	MN FD FL 2/B				
Point ID	F5269				
Plant Spec Point Desc.	SG2 MAIN FW FLOW				
Generic Condensed Desc.	Stm Gen 2 (or B) Main Feedwater Flow				
Analog Digital	A				
Engr Units Dig States	Klb/hr				
Engr Units Conversion	N/A				
Min Instrument Range	0				
Max Instrument Range	6300				
Zero Point Reference	N/A				
Reference Point Notes	N/A				
PROC SENS	S				
Number of Sensors	1				
How Processed					
Sensor Locations	Turbine Building				
Alarm Trip Setpoints					
NI Det. PS Cut Off Pwr Lvl	N/A				
NI Det. PS Turn On Pwr Lvl	N/A				
Instrument Fail. Mode	LOW				
Temp. Comp. for DP Xmtrs	N				
Level Reference Leg	N/A				
Unique System Desc.	Main Feedwater Flow				

Date 4/8/92

Reactor Unit MS2

Data Feeder N/A

NRC ERDS Parameter MN FD FL 3/C

Point ID N/A

Plant Spec Point Desc.

Generic|Condensed Desc. Stm Gen 3 (or C) Main Feedwater Flow

Analog|Digital A

Engr Units|Dig States

Engr Units Conversion N/A

Min Instrument Range

Max Instrument Range

Zero Point Reference N/A

Reference Point Notes N/A

PROC | SENS

Number of Sensors

How Processed

Sensor Locations

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode

Temp. Comp. for DP Xmtrs N

Level Reference Leg

Unique System Desc.

Date 4/8/92

Reactor Unit MS2

Data Feeder N/A

NRC ERDS Parameter MN FD FL 4/D

Point ID N/A

Plant Spec Point Desc.

Generic|Condensed Desc. Stm Gen 4 (or D) Main Feedwater Flow

Analog|Digital A

Engr Units|Dig States

Engr Units Conversion N/A

Min Instrument Range

Max Instrument Range

Zero Point Reference N/A

Reference Point Notes N/A

PROC | SENS

Number of Sensors

How Processed

Sensor Locations

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode

Temp. Comp. for DP Xmtrs N

Level Reference Leg

Unique System Desc.

Date	4/8/92	Reactor Unit	MS2	Data Feeder	N/A
NRC ERDS Parameter	AX FD FL I/A				
Point ID	F5277				
Plant Spec Point Desc.	SG1 AUX FW FLOW				
Generic Condensed Desc.	Strm Gen 1 (or A) Auxiliary FW Flow				
Analog Digital	A				
Engr Units Dig States	GPM				
Engr Units Conversion	N/A				
Min Instrument Range	0				
Max Instrument Range	500				
Zero Point Reference	N/A				
Reference Point Notes	N/A				
PROC SENS	P				
Number of Sensors	2				
How Processed	Average				
Sensor Locations	Turbine Building				
Alarm Trip Setpoints					
NI Det. PS Cut Off Pwr Lvl	N/A				
NI Det. PS Turn On Fwr Lvl	N/A				
Instrument Fail. Mode	LOW				
Temp. Comp. for DP Xmtrs	N				
Level Reference Leg	N/A				
Unique System Desc.	Auxiliary Feedwater Flow				

Date 4/8/92	Reactor Unit MS2	Data Feeder N/A
NRC ERDS Parameter	AX FD FL 2/B	
Point ID	F5278	
Plant Spec Point Desc.	SG2 AUX FW FLOW	
Generic Condensed Desc.	Stm Gen 2 (or B) Auxiliary FW Flow	
Analog Digital	A	
Engr Units Dig States	GPM	
Engr Units Conversion	N/A	
Min. Instrument Range	0	
Max Instrument Range	600	
Zero Point Reference	N/A	
Reference Point Notes	N/A	
PROC SENS	P	
Number of Sensors	2	
How Processed	Average	
Sensor Locations	Turbine Building	
Alarm Trip Setpoints		
NI Det. PS Cut Off Pwr Lvl	N/A	
NI Det. PS Turn On Pwr Lvl	N/A	
Instrument Fail. Mode	LOW	
Temp. Comp. for DP Xmtrs	N	
Level Reference Leg	N/A	
Unique System Desc.	Auxiliary Feedwater Flow	

Date	4/8/92	Reactor Unit	MS2	Data Feeder	N/A
NRC ERDS Parameter	AX FD FL 3/C				
Point ID	N/A				
Plant Spec Point Desc.					
Generic Condensed Desc.	Stm Ger. 3 (or C) Auxilliary FW Flow				
Analog Digital	A				
Engr Units Dig States					
Engr Units Conversion	N/A				
Min Instrument Range					
Max Instrument Range					
Zero Point Reference	N/A				
Reference Point Notes	N/A				
PROC SENS					
Number of Sensors					
How Processed					
Sensor Locations					
Alarm Trip Setpoints					
NI Det. PS Cut Off Pwr Lvl	N/A				
NI Det. PS Turn On Pwr Lvl	N/A				
Instrument Fail. Mode					
Temp. Comp. for DP Xmtrs	N				
Level Reference Leg					
Unique System Desc.					

Date	4/8/92	Reactor Unit	MS2	Data Feeder	N/A
NRC ERDS Parameter	AX FD FL 4/D				
Point ID	N/A				
Plant Spec Point Desc.					
Generic Condensed Desc.	Stm Gen 4 (or D) Auxilliary FW Flow				
Analog Digital	A				
Engr Units Dig States					
Engr Units Conversion	N/A				
Min Instrument Range					
Max Instrument Range					
Zero Point Reference	N/A				
Reference Point Notes	N/A				
PROC SENS					
Number of Sensors					
How Processed					
Sensor Locations					
Alarm Trip Setpoints					
NI Det. PS Cut Off Pwr Lvl	N/A				
NI Det. PS Turn On Pwr Lvl	N/A				
Instrument Fail. Mode					
Temp. Comp. for DP Xmtrs	N				
Level Reference Leg					
Unique System Desc.					

Date 4/8/92	Reactor Unit MS2	Data Feeder N/A
NRC ERDS Parameter	HL TEMP I/A	
Point ID	T111X	
Plant Spec Point Desc.	HOT LEG TEMP 1 (WR)	
Generic Condensed Desc.	Stm Gen 1 (or A) Inlet Temperature	
Analog Digital	A	
Engr Units Dig States	DEG F	
Engr Units Conversion	N/A	
Min Instrument Range	150	
Max Instrument Range	750	
Zero Point Reference	N/A	
Reference Point Notes	N/A	
PROC SENS	S	
Number of Sensors	1	
How Processed		
Sensor Locations	Containment	
Alarm Trip Setpoints		
NI Det. PS Cut Off Pwr Lvl	N/A	
NI Det. PS Turn On Pwr Lvl	N/A	
Instrument Fail. Mode	HIGH	
Temp. Comp. for DP Xmtrs	N	
Level Reference Leg	N/A	
Unique System Desc.	RCS Hot Leg Temperature	

Date 4/8/92

Reactor Unit MS2

Data Feeder N/A

NRC ERDS Parameter HL TEMP 2/B

Point ID T121X

Plant Spec Point Desc. HOT LEG TEMP 2 (WR)

Generic|Condensed Desc. Stm Gen 2 (or B) Inlet Temperature

Analog|Digital A

Engr Units|Dig States DEG F

Engr Units Conversion N/A

Min Instrument Range 150

Max Instrument Range 750

Zero Point Reference N/A

Reference Point Notes N/A

PROC | SENS S

Number of Sensors 1

How Processed

Sensor Locations Containment

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode HIGH

Temp. Comp. for DP Xmtrs N

Level Reference Leg N/A

Unique System Desc. RCS Hot Leg Temperature

Date	4/8/92	Reactor Unit	MS2	Data Feeder	N/A
NRC ERDS Parameter	HL TEMP 3/C				
Point ID	N/A				
Plant Spec Point Desc.					
Generic Condensed Desc.	Stm Gen 3 (or C) Inlet Temperature				
Analog Digital	A				
Engr Units Dig States					
Engr Units Conversion	N/A				
Min Instrument Range					
Max Instrument Range					
Zero Point Reference	N/A				
Reference Point Notes	N/A				
PROC SENS					
Number of Sensors					
How Processed					
Sensor Locations					
Alarm Trip Setpoints					
NI Det. PS Cut Off Pwr Lvl	N/A				
NI Det. PS Turn On Pwr Lvl	N/A				
Instrument Fail. Mode					
Temp. Comp. for DP Xmtrs	N				
Level Reference Leg					
Unique System Desc.					

Date 4/8/92	Reactor Unit MS2	Data Feeder N/A
NRC ERDS Parameter	HL TEMP 4/D	
Point ID	N/A	
Plant Spec Point Desc.		
Generic Condensed Desc.	Stm Gen 4 (or D) Inlet Temperature	
Analog Digital	A	
Engr Units Dig States		
Engr Units Conversion	N/A	
Min Instrument Range		
Max Instrument Range		
Zero Point Reference	N/A	
Reference Point Notes	N/A	
PROC SENS		
Number of Sensors		
How Processed		
Sensor Locations		
Alarm Trip Setpoints		
NI Det. PS Cut Off Pwr Lvl	N/A	
NI Det. PS Turn On Pwr Lvl	N/A	
Instrument Fail. Mode		
Temp. Comp. for DP Xmits	N	
Leve Reference Leg		
Unique System Desc.		

Date	4/8/92	Reactor Unit	MS2	Data Feeder	N/A
NRC ERDS Parameter	CL TEMP VA				
Point ID	T115				
Plant Spec Point Desc.	COLD LEG TEMP 1 (WR)				
Generic Condensed Desc.	Stm Gen 1 (or A) Outlet Temperature				
Analog Digital	A				
Engr Units Dig States	DEG F				
Engr Units Conversion	N/A				
Min Instrument Range	0				
Max Instrument Range	750				
Zero Point Reference	N/A				
Reference Point Notes	N/A				
PROC SENS	S				
Number of Sensors	1				
How Processed					
Sensor Locations	Containment				
Alarm Trip Setpoints					
NI Det. PS Cut Off Pwr Lvl	N/A				
NI Det. PS Turn On Pwr Lvl	N/A				
Instrument Fail. Mode	HIGH				
Temp. Comp. for DP Xmtrs	N				
Level Reference Leg	N/A				
Unique System Desc.	RCS Cold Leg Temperature				

Date 4/8/92	Reactor Unit MS2	Data Feeder N/A
NRC ERDS Parameter	CL TEMP 2/B	
Point ID	T125	
Plant Spec Point Desc.	COLD LEG TEMP 2 (WR)	
Generic Condensed Desc.	Stm Gen 2 (or B) Outlet Temperature	
Analog Digital	A	
Engr Units Dig States	DEG F	
Engr Units Conversion	N/A	
Min Instrument Range	0	
Max Instrument Range	750	
Zero Point Reference	N/A	
Reference Point Notes	N/A	
PROC SENS	S	
Number of Sensors	1	
How Processed		
Sensor Locations	Containment	
Alarm Trip Setpoints		
NI Det. PS Cut Off Pwr Lvl	N/A	
NI Det. PS Turn On Pwr Lvl	N/A	
Instrument Fail. Mode	HIGH	
Temp. Comp. for DP Xmtrs	N	
Level Reference Leg	N/A	
Unique System Desc.	RCS Cold Leg Temperature	

Date 4/8/92

Reactor Unit MS2

Data Feeder N/A

NRC ERDS Parameter CL TEMP 3/C

Point ID N/A

Plant Spec Point Desc.

Generic|Condensed Desc. Stm Gen 3 (or C) Outlet Temperature

Analog|Digital A

Engr Units|Dig States

Engr Units Conversion N/A

Min Instrument Range

Max Instrument Range

Zero Point Reference N/A

Reference Point Notes N/A

PROC | SENS

Number of Sensors

How Processed

Sensor Locations

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode

Temp. Comp. for DP Xmtrs N

Level Reference Leg

Unique System Desc.

Date 4/8/92

Reactor Unit MS2

Data Feeder N/A

NRC ERDS Parameter CL TEMP 4/D

Point ID N/A

Plant Spec Point Desc.

Generic|Condensed Desc. Stm Gen 4 (or D) Outlet Temperature

Analog|Digital A

Engr Units|Dig States

Engr Units Conversion N/A

Min Instrument Range

Max Instrument Range

Zero Point Reference N/A

Reference Point Notes N/A

PROC | SENS

Number of Sensors

How Processed

Sensor Locations

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode

Temp. Comp. for DP Xmtrs N

Level Reference Leg

Unique System Desc.

Date 4/8/92

Reactor Unit MS2

Data Feeder N/A

NRC ERDS Parameter RCS PRESSURE

Point ID PZRPR

Plant Spec Point Desc. PRESSURIZER PRESSURE

Generic|Condensed Desc. Reactor Coolant System Pressure

Analog|Digital A

Engr Units|Dig States PSIA

Engr Units Conversion N/A

Min Instrument Range 0

Max Instrument Range 3000

Zero Point Reference N/A

Reference Point Notes N/A

PROC | SENS P

Number of Sensors 5

How Processed Validated Lowest

Sensor Locations Containment

Alarm|Trip Setpoints LO:2100;HI:2350

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode LOW

Temp. Comp. for DP Xmtrs N

Level Reference Leg N/A

Unique System Desc. Pressurizer Pressure is the lowest validated pressure from four narrow range (1500-2500 psia) and one wide range (0-3000 psia) pressure loops.

Date 4/8/92

Reactor Unit MS2

Data Feeder N/A

NRC ERDS Parameter	PRZR LEVEL
Point ID	PZRLVL
Plant Spec Point Desc.	PRESSURIZER LEVEL
Generic Condensed Desc.	Primary System Pressurizer Level
Analog Digital	A
Engr Units Dig States	%
Engr Units Conversion	=3.6 inches per %
Min Instrument Range	0
Max Instrument Range	100
Zero Point Reference	Other
Reference Point Notes	Referenced to lower level instrument tap
PROC SENS	P
Number of Sensors	2
How Processed	Validated Average
Sensor Locations	Containment
Alarm Trip Setpoints	LOLO:20
NI Det. PS Cut Off Pwr Lvl	N/A
NI Det. PS Turn On Pwr Lvl	N/A
Instrument Fail. Mode	LOW
Temp. Comp. for DP Xmtrs	N
Level Reference Leg	WET
Unique System Desc.	Pressurizer Level is calibrated for hot full power conditions. The top of the pressurizer heaters is at = 10% of indicated level.

Date	4/8/92	Reactor Unit	MS2	Data Feeder	N/A
NRC ERDS Parameter		RCS CHG/MU			
Point ID		F212			
Plant Spec Point Desc.		CHARGING FLOW			
Generic Condensed Desc.		Primary System Charging or Makeup Flow			
Analog Digital		A			
Engr Units Dig States		GPM			
Engr Units Conversion		N/A			
Min Instrument Range		0			
Max Instrument Range		140			
Zero Point Reference		N/A			
Reference Point Notes		N/A			
PROC SENS		S			
Number of Sensors		1			
How Processed					
Sensor Locations		Enclosure Building			
Alarm Trip Setpoints					
NI Det. PS Cut Off Pwr Lvl		N/A			
NI Det. PS Turn On Pwr Lvl		N/A			
Instrument Fail. Mode		LOW			
Temp. Comp. for DP Xmtrs		N			
Level Reference Leg		N/A			
Unique System Desc.		Charging Flow			

Date 4/8/92	Reactor Unit MS2	Data Feeder N/A
NRC ERDS Parameter	HP SI FLOW	
Point ID	TOTHP SI	
Plant Spec Point Desc.	Total HPSI Flow	
Generic Condensed Desc.	High Pressure Safety Injection Flow	
Analog Digital	A	
Engr Units Dig States	GPM	
Engr Units Conversion	N/A	
Min Instrument Range	0	
Max Instrument Range	300	
Zero Point Reference	N/A	
Reference Point Notes	N/A	
PROC SENS	P	
Number of Sensors	4	
How Processed	Sum	
Sensor Locations	Enclosure Building	
Alarm Trip Setpoints		
NI Det. PS Cut Off Pwr Lvl	N/A	
NI Det. PS Turn On Pwr Lvl	N/A	
Instrument Fail. Mode	LOW	
Temp. Comp. for DP Xmtrs	N	
Level Reference Leg	N/A	
Unique System Desc.	High Pressure Safety Injection Flow is the Validated Total of four sensors, F311, F312, F331, and F341.	

Date 4/8/92

Reactor Unit MS2

Data Feeder N/A

NRC ERDS Parameter LP SI FLOW

Point ID TOTLPSI

Plant Spec Point Desc. Total LPSI Flow

Generic|Condensed Desc. Low Pressure Safety Injection Flow

Analog|Digital A

Engr Units|Dig States GPM

Engr Units Conversion N/A

Min Instrument Range 0

Max Instrument Range 2000

Zero Point Reference N/A

Reference Point Notes N/A

PROC | SENS P

Number of Sensors 4

Row Processed Sum

Sensor Locations Enclosure Building

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fall. Mode LOW

Temp. Comp. for DP Xmtrs N

Level Reference Leg N/A

Unique System Desc. Total LPSI Flow is the validated sum of four sensors, F312, F322, F332, and F342.

Date 4/8/92

Reactor Unit MS2

Data Feeder N/A

NRC ERDS Parameter CTMNT SMP NR

Point ID L9155

Plant Spec Point Desc. CTMT NORMAL SUMP LEVEL

Generic|Condensed Desc. Containment Sump Narrow Range Level

Analog|Digital A

Engr Units|Dig States %

Engr Units Conversion =6000 gal per %

Min Instrument Range 0

Max Instrument Range 100

Zero Point Reference CNTFLR

Reference Point Notes N/A

PROC | SENS S

Number of Sensors 1

How Processed

Sensor Locations Containment

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode LOW

Temp. Comp. for DP Xmtrs N

Level Reference Leg N/A

Unique System Desc. Containment Normal Sump Level. Indication of 100% is approximately 600,000 gallons.

Date 4/8/92

Reactor Unit MS2

Data Feeder N/A

NRC ERDS Parameter CTMNT SMP WR

Point ID N/A

Plant Spec Point Desc.

Generic|Condensed Desc. Containment Sump Wide Range Level

Analog|Digital A

Engr Units|Dig States

Engr Units Conversion N/A

Min Instrument Range

Max Instrument Range

Zero Point Reference N/A

Reference Point Notes N/A

PROC | SENS

Number of Sensors

How Processed

Sensor Locations

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode

Temp. Comp. for DP Xmtrs N

Level Reference Leg

Unique System Desc.

Date 4/8/92

Reactor Unit MS2

Data Feeder N/A

NRC ERDS Parameter EFF GAS RAD

Point ID RU1

Plant Spec Point Desc. U1 STACK RAD MONITOR

Generic|Condensed Desc. Radioactivity of Released Gasses

Analog|Digital A

Engr Units|Dig States uCi/CC

Engr Units Conversion N/A

Min Instrument Range E-3

Max Instrument Range E+5

Zero Point Reference N/A

Reference Point Notes N/A

PROC | SENS S

Number of Sensors 2

How Processed

Sensor Locations Yard-Base of Stack

Alarm|Trip Setpoints 0.1 μ ci/cc

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fall. Mode LOW

Temp. Comp. for DP Xmtrs N

Level Reference Leg N/A

Unique System Desc. Range shown is for Xe-133; range for T=0 mix is E-5 to E+3. Mid range conversion Factor: $1.8 \times 10^{-5} \mu\text{ci/cc/ccpm}$
 High range conversion Factor: $1.0 \times 10^{-2} \mu\text{ci/cc/ccpm}$
 Both are based on assumed average gamma energy of 0.4Mev for noble gas mix. Stack flow range can be 0 to 180,000 cfm. 1 ccpm = 100 cpm

Date 4/8/92

Reactor Unit MS2

Data Feeder N/A

NRC ERDS Parameter	EFF LIQ RAD
Point ID	R9049
Plant Spec Point Desc.	CWM TK TO CW RAD LVL
Generic Condensed Desc.	Radioactivity of Released Liquids
Analog Digital	A
Engr Units Dig States	CPM
Engr Units Conversion	N/A
Min Instrument Range	.01
Max Instrument Range	1000
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC SENS	S
Number of Sensors	1
How Processed	
Sensor Locations	Enclosure Building
Alarm Trip Setpoints	Variable
NI Det. PS Cut Off Pwr Lvl	N/A
NI Det. PS Turn On Pwr Lvl	N/A
Instrument Fail. Mode	LOW
Temp. Comp. for DP Xmtrs	N
Level Reference Leg	N/A
Unique System Desc.	Monitor is automatically isolated prior to allowable limits. Reading would remain high despite isolation. Monitor is offscale high before any release of significant dose. Conversion to meaningful $\mu\text{Ci/sec}$ depends largely on background (varies), flow rate, and nuclide mix.

Date 4/8/92

Reactor Unit MS2

Data Feeder N/A

NRC ERDS Parameter COND A/E RAD

Point ID R5099

Plant Spec Point Desc. SJAE RAD MONITOR

Generic|Condensed Desc. Condenser Air Ejector Radioactivity

Analog|Digital A

Engr Units|Dig States CPM

Engr Units Conversion N/A

Min Instrument Range E+1

Max Instrument Range E+6

Zero Point Reference N/A

Reference Point Notes N/A

PROC | SENS S

Number of Sensors 1

How Processed

Sensor Locations Turbine Building

Alarm|Trip Setpoints Variable

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode LOW

Temp. Comp. for DP Xmtrs N

Level Reference Leg N/A

Unique System Desc. Conversion to $\mu\text{Ci/cc}$ depends on nuclide mix, monitor background, and detector efficiency.
Typical factor is $4 \times 10^{-8} \mu\text{Ci/cc/ccpm}$.
Discharge is to MP1 stack. All release estimates should use MP1 stack monitor (RIC-1705-79). 1 ccpm = 100 cpm

Date 4/8/92	Reactor Unit MS2	Data Feeder N/A
NRC ERDS Parameter	CNTMNT RAD	
Point ID	CTMTRAD	
Plant Spec Point Desc.	CTMT AREA RADATION	
Generic Condensed Desc.	Radiation Level in the Containment	
Analog Digital	A	
Engr Units Dig States	R/HR	
Engr Units Conversion	N/A	
Min Instrument Range	1	
Max Instrument Range	E+8	
Zero Point Reference	N/A	
Reference Point Notes	N/A	
PROC SENS	P	
Number of Sensors	2	
How Processed	Validated Average	
Sensor Locations	Containment	
Alarm Trip Setpoints	5 R/HR	
NI Det. PS Cut Off Pwr Lvl	N/A	
NI Det. PS Turn On Pwr Lvl	N/A	
Instrument Fail. Mode	LOW	
Temp. Comp. for DP Xmtrs	N	
Level Reference Leg	N/A	
Unique System Desc.	Containment Area Radiation	

Date	4/8/92	Reactor Unit	MS2	Data Feeder	N/A
NRC ERDS Parameter	RCS LTDN RAD				
Point ID	CVR202A				
Plant Spec Point Desc.	LETDOWN RAD ACT LOG				
Generic Condensed Desc.	Rad Level of the RCS Letdown Line				
Analog Digital	A				
Engr Units Dig States	KCPM				
Engr Units Conversion	N/A				
Min Instrument Range	.01				
Max Instrument Range	1000				
Zero Point Reference	N/A				
Reference Point Notes	N/A				
PROC SENS	S				
Number of Sensors	1				
How Processed					
Sensor Locations	Enclosure Building				
Alarm Trip Setpoints	Variable				
NI Det. PS Cut Off Pwr Lvl	N/A				
NI Det. PS Turn On Pwr Lvl	N/A				
Instrument Fail. Mode	LOW				
Temp. Comp. for DP Xmtrs	N				
Level Reference Leg	N/A				
Unique System Desc.	Letdown is expected to isolate for most accidents which result in fuel element failure. Used for trends only, since fuel failures may result in off-scale high readings. Sample line plateout has resulted in a significant background reading.				

Date 4/8/92	Reactor Unit MS2	Data Feeder N/A
NRC ERDS Parameter	MAIN SL 1/A	
Point ID	R4299A	
Plant Spec Point Desc.	MAIN STM LINE RAD MON	
Generic Condensed Desc.	Stm Gen 1 (or A) Steam Line Rad Level	
Analog Digital	A	
Engr Units Dig States	R/HR	
Engr Units Conversion	N/A	
Min Instrument Range	E-2	
Max Instrument Range	E+4	
Zero Point Reference	N/A	
Reference Point Notes	N/A	
PROC SENS	S	
Number of Sensors	1	
How Processed		
Sensor Locations	Enclosure Building	
Alarm Trip Setpoints	.03 R/HR	
NI Det. PS Cut Off Pwr Lvl	N/A	
NI Det. PS Turn On Pwr Lvl	N/A	
Instrument Fall. Mode	LOW	
Temp. Comp. for DP Xmtrs	N	
Level Reference Leg	N/A	
Unique System Desc.	Release rate conversion depends on nuclide mix, steam flow, and detector correction factors. Default value for a 0 - 4 HR mix and an assumed flow of 6000 cfm is 14 ci/sec/R/HR.	

Date 4/8/92	Reactor Unit MS2	Data Feeder N/A
NRC ERDS Parameter	MAIN SL 2/B	
Point ID	R4299C	
Plant Spec Point Desc.	MAIN STM LINE RAD MON	
Generic Condensed Desc.	Stm Gen 2 (or B) Steam line Rad Level	
Analog Digital	A	
Engr Units Dig States	R/HR	
Engr Units Conversion	N/A	
Min Instrument Range	E-2	
Max Instrument Range	E+4	
Zero Point Reference	N/A	
Reference Point Notes	N/A	
PROC SENS	S	
Number of Sensors	1	
How Processed		
Sensor Locations	Enclosure Building	
Alarm Trip Setpoints	.03 R/HR	
NI Det. PS Cut Off Pwr Lvl	N/A	
NI Det. PS Turn On Pwr Lvl	N/A	
Instrument Fail. Mode	LOW	
Temp. Comp. for DP Xmtrs	N	
Level Reference Leg	N/A	
Unique System Desc.	Release rate conversion depends on nuclide mix, steam flow, and detector correction factors. Default value for a 0 - 4 HR mix and an assumed flow of 6000 cfm is 14 ci/sec/R/HR.	

Date	4/8/92	Reactor Unit	MS2	Data Feeder	N/A
NRC ERDS Parameter	MAIN SL 3/C				
Point ID	N/A				
Plant Spec Point Desc.					
Generic Condensed Desc.	Stm Gen 3 (or C) Steam Line Rad Level				
Analog Digital	A				
Engr Units Dig States					
Engr Units Conversion	N/A				
Min Instrument Range					
Max Instrument Range					
Zero Point Reference	N/A				
Reference Point Notes	N/A				
PROC SENS					
Number of Sensors					
How Processed					
Sensor Locations					
Alarm Trip Setpoints					
NI Det. PS Cut Off Pwr Lvl	N/A				
NI Det. PS Turn On Pwr Lvl	N/A				
Instrument Fail. Mode					
Temp. Comp. for DP Xmtrs	N				
Level Reference Leg					
Unique System Desc.					

Date	4/8/92	Reactor Unit	MS2	Data Feeder	N/A
NRC ERDS Parameter	MAIN SL 4/D				
Point ID	N/A				
Plant Spec Point Desc.					
Generic Condensed Desc.	Stm Gen 4 (or D) Steam Line Rad Level				
Analog Digital	A				
Engr Units Dig States					
Engr Units Conversion	N/A				
Min Instrument Range					
Max Instrument Range					
Zero Point Reference	N/A				
Reference Point Notes	N/A				
PROC SENS					
Number of Sensors					
How Processed					
Sensor Locations					
Alarm Trip Setpoints					
NI Det. PS Cut Off Pwr Lvl	N/A				
NI Det. PS Turn On Pwr Lvl	N/A				
Instrument Fail. Mode					
Temp. Comp. for DP Xmtrs	N				
Level Reference Leg					
Unique System Desc.					

Date 4/8/92

Reactor Unit MS2

Data Feeder N/A

NRC ERDS Parameter SG BD RAD 1A

Point ID R4262

Plant Spec Point Desc. SG BLOWDOWN RAD MON

Generic|Condensed Desc. Stm Gen 1 (or A) Blowdown Rad Level

Analog|Digital A

Engr Units|Dig States CPM

Engr Units Conversion N/A

Min Instrument Range E-2

Max Instrument Range E+3

Zero Point Reference N/A

Reference Point Notes N/A

PROC | SENS S

Number of Sensors 1

How Processed Validated Average

Sensor Locations Enclosure Building

Alarm|Trip Setpoints Variable

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode LOW

Temp. Comp. for DP Xmits N

Level Reference Leg N/A

Unique System Desc. Combined blowdown from both steam generators. Conversion factor for Cs-137 is $\approx 5 \times 10^{-9} \mu\text{Ci/cc/ccpm}$. Air ejector will automatically isolate blowdown before significant release. Blowdown will be off-scale high and isolate releases well before levels of concern.
1 ccpm = 100 cpm

Date 4/8/92

Reactor Unit MS2

Data Feeder N/A

NRC ERDS Parameter SG BD RAD 2B

Point ID R4262

Plant Spec Point Desc. SG BLOWDOWN RAD MON

Generic|Condensed Desc. Stm Gen 2 (or B) Blowdown Rad Level

Analog|Digital A

Engr Units|Dig States CPM

Engr Units Conversion N/A

Min Instrument Range E-2

Max Instrument Range E+3

Zero Point Reference N/A

Reference Point Notes N/A

PROC | SENS S

Number of Sensors 1

How Processed

Sensor Locations Enclosure Building

Alarm|Trip Setpoints Variable

NI Det. PS Cut Off Pwr Lvl N/A

NI Let. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode LOW

Temp. Comp. for DP Xmtrs N

Level Reference Leg N/A

Unique System Desc. Combined blowdown from both steam generators. Conversion factor for Cs-137 is $\approx 5 \times 10^{-9} \mu\text{Ci/cc/ccpm}$.
 Air ejector will automatically isolate blowdown before significant release. Blowdown will be off-scale high and isolate releases well before levels of concern.
 1 ccpm = 100 cpm

Date 4/8/92

Reactor Unit MS2

Data Feeder N/A

NRC ERDS Parameter SG BD RAD 3C

Point ID N/A

Plant Spec Point Desc.

Generic|Condensed Desc. Stm Gen 3 (or C) Blowdown Rad Level

Analog|Digital A

Engr Units|Dig States

Engr Units Conversion N/A

Min Instrument Range

Max Instrument Range

Zero Point Reference N/A

Reference Point Notes N/A

PROC | SENS

Number of Sensors

How Processed

Sensor Locations

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode

Temp. Comp. for DP Xmits N

Level Reference Leg

Unique System Desc.

Date	4/8/92	Reactor Unit	MS2	Data Feeder	N/A
NRC ERDS Parameter	SG BD RAD 4D				
Point ID	N/A				
Plant Spec Point Desc.					
Generic Condensed Desc.	Stm Gen 4 (or D) Blowdown Rad Level				
Analog Digital	A				
Engr Units Dig States					
Engr Units Conversion	N/A				
Min Instrument Range					
Max Instrument Range					
Zero Point Reference	N/A				
Reference Point Notes	N/A				
PROC SENS					
Number of Sensors					
How Processed					
Sensor Locations					
Alarm Trip Setpoints					
NI Det. PS Cut Off Pwr Lvl	N/A				
NI Det. PS Turn On Pwr Lvl	N/A				
Instrument Fail. Mode					
Temp. Comp. for DP Xmtrs	N				
Level Reference Leg					
Unique System Desc.					

Date	4/8/92	Reactor Unit	MS2	Data Feeder	N/A
NRC ERDS Parameter	CTMNT PRESS				
Point ID	CTMTPR				
Plant Spec Point Desc.	CTMT PRESSURE (NR)				
Generic Condensed Desc.	Containment Pressure				
Analog Digital	A				
Engr Units Dig States	PSIG				
Engr Units Conversion	N/A				
Min Instrument Range	0				
Max Instrument Range	85				
Zero Point Reference	N/A				
Reference Point Notes	N/A				
PROC SENS	P				
Number of Sensors	4				
How Processed	Validated Average				
Sensor Locations	Enclosure Building				
Alarm Trip Setpoints					
NI Det. PS Cut Off Pwr Lvl	N/A				
NI Det. PS Turn On Pwr Lvl	N/A				
Instrument Fall. Mode	LOW				
Temp. Comp. for DP Xmtrs	N				
Level Reference Leg	N/A				
Unique System Desc.	Narrow Range Containment Pressure				

Date 4/8/92

Reactor Unit MS2

Data Feeder N/A

NRC ERDS Parameter	CTMNT TEMP
Point ID	CTMTT
Plant Spec Point Desc.	CTMT AIR TEMPERATURE
Generic Condensed Desc.	Containment Temperature
Analog Digital	A
Engr Units Dig States	DEG F
Engr Units Conversion	N/A
Min Instrument Range	0
Max Instrument Range	350
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC SENS	P
Number of Sensors	12
How Processed	Validated Weighted Average
Sensor Locations	Containment
Alarm Trip Setpoints	
NI Det. PS Cut Off Pwr Lvl	N/A
NI Det. PS Turn On Pwr Lvl	N/A
Instrument Fail. Mode	HIGH
Temp. Comp. for DP Xmtrs	N
Level Reference Leg	N/A
Unique System Desc.	Containment Air Temperature

Date	4/8/92	Reactor Unit	MS2	Data Feeder	N/A
NRC ERDS Parameter	H2 CONC				
Point ID	CTMTH2				
Plant Spec Point Desc.	CTMT H2 CONCEN.				
Generic Condensed Desc.	Containment Hydrogen Concentration				
Analog Digital	A				
Engr Units Dig States	%				
Engr Units Conversion	N/A				
Min Instrument Range	0				
Max instrument Range	10				
Zero Point Reference	N/A				
Reference Point Notes	N/A				
PROC SENS	P				
Number of Sensors	2				
How Processed	Validated Average				
Sensor Locations	Enclosure Building				
Alarm Trip Setpoints					
NI Det. PS Cut Off Pwr Lvl	N/A				
NI Det. PS Turn On Pwr Lvl	N/A				
Instrument Fall. Mode	LOW				
Temp. Comp. for DP Xmtrs	N				
Level Reference Leg	N/A				
Unique System Desc.	Containment Hydrogen Concentration				

Date 4/8/92

Reactor Unit MS2

Data Feeder N/A

NRC ERDS Parameter BWST LEVEL

Point ID L3001

Plant Spec Point Desc. RWST LEVEL

Generic|Condensed Desc. Borated Water Storage Tank Level

Analog|Digital A

Engr Units|Dig States %

Engr Units Conversion ≈4750 gallons per %

Min Instrument Range 0

Max Instrument Range 100

Zero Point Reference Other

Reference Point Notes Referenced to top of tank outlet pipe

PROC | SENS S

Number of Sensors 1

How Processed

Sensor Locations Yard

Alarm|Trip Setpoints Lo Level 94%

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode LOW

Temp. Comp. for DP Xmtrs N

Level Reference Leg N/A

Unique System Desc. Refueling Water Storage Tank Level

Date	4/8/92	Reactor Unit	MS2	Data Feeder	N/A
NRC ERDS Parameter	WIND SPEED				
Point ID	WS142				
Plant Spec Point Desc.	WIND SPEED (142 FT.)				
Generic Condensed Desc.	Wind Speed at the Reactor Site				
Analog Digital	A				
Engr Units Dig States	MPH				
Engr Units Conversion	N/A				
Min Instrument Range	0				
Max Instrument Range	100				
Zero Point Reference	N/A				
Reference Point Notes	N/A				
PROC SENS	S				
Number of Sensors	1				
How Processed					
Sensor Locations	Yard				
Alarm Trip Setpoints					
NI Det. PS Cut Off Pwr Lvl	N/A				
NI Det. PS Turn On Pwr Lvl	N/A				
Instrument Fail. Mode	LOW				
Temp. Comp. for DP Xmtrs	N				
Level Reference Leg	N/A				
Unique System Desc.	Wind Speed at 142 ft elevation.				

Date	4/8/92	Reactor Unit	MS2	Data Feeder	N/A
NRC ERDS Parameter	WIND DIR				
Point ID	WD142				
Plant Spec Point Desc.	WIND DIR. (142 FT.)				
Generic Condensed Desc.	Wind Direction at the Reactor Site				
Analog Digital	A				
Engr Units Dig States	DEGREES				
Engr Units Conversion	N/A				
Min Instrument Range	0				
Max Instrument Range	360				
Zero Point Reference	North				
Reference Point Notes	Measured in the 'from' direction				
PROC SENS	S				
Number of Sensors	1				
How Processed					
Sensor Locations	Yard				
Alarm Trip Setpoints					
NI Det. PS Cut Off Pwr Lvl	N/A				
NI Det. PS Turn On Pwr Lvl	N/A				
Instrument Fail. Mode	AS IS				
Temp. Comp. for DP Xmtrs	N				
Level Reference Leg	N/A				
Unique System Desc.	Wind Direction at 142 ft elevation.				

Date 4/8/92	Reactor Unit MS2	Data Feeder N/A
NRG ERDS Parameter	STAB CLASS	
Point ID	DT142	
Plant Spec Point Desc.	DELTA TEMP. (142 FT.)	
Generic Condensed Desc.	Air Stability at the Reactor Site	
Analog Digital	A	
Engr Units Dig States	DEG F	
Engr Units Conversion	N/A	
Min Instrument Range	-10	
Max Instrument Range	18	
Zero Point Reference	N/A	
Reference Point Notes	N/A	
PROC SENS	P	
Number of Sensors	2	
How Processed		
Sensor Locations	Yard	
Alarm Trip Setpoints		
NI Det. PS Cut Off Pwr Lvl	N/A	
NI Det. PS Turn On Pwr Lvl	N/A	
Instrument Fail. Mode	Varies depending on sensor failure	
Temp. Comp. for DP Xmtrs	N	
Level Reference Leg	N/A	
Unique System Desc.	Delta Temperature is the difference in temperature between the 142 ft and 33 ft elevations.	

Date 4/9/92

Reactor Unit MS2

Data Feeder N/A

NRC ERDS Parameter REAC VES LEV

Point ID HDLEV-B

Plant Spec Point Desc. REACTOR VESSEL LEVEL

Generic|Condensed Desc. Reactor Vessel Water Level

Analog|Digital A

Engr Units|Dig States %

Engr Units Conversion See Description

Min Instrument Range 0

Max Instrument Range 100

Zero Point Reference Other

Reference Point Notes Top of Fuel Alignment Plate

PROC | SENS P

Number of Sensors 8

How Processed Other-

Sensor Locations Containment

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fall. Mode Various

Temp. Comp. for DP Xmtrs N

Level Reference Leg N/A

Unique System Desc. Eight Heated Junction Thermocouple sensors provide covered/uncovered indication.

Sensor 1 2 3 4 5 6 7 8

Percent 100 80 61 43 29 19 12 7

Inches 186 144 108 72 51 30 20 10

Top of Active Fuel is 25" below point 8.

Date 8/27/92

Reactor Unit MS2

Data Feeder N/A

NRC ERDS Parameter	EFF LIQ RAD
Point ID	R9116
Plant Spec Point Desc.	PER WASTE CW RAD LVL
Generic Condensed Desc.	Radioactivity of Released Liquids
Analog Digital	A
Engr Units Dig States	CPM
Engr Units Conversion	N/A
Min Instrument Range	.01
Max Instrument Range	1000
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC SENS	S
Number of Sensors	1
How Processed	
Sensor Locations	Enclosure Building
Alarm Trip Setpoints	Variable
NI Det. PS Cut Off Pwr Lvl	N/A
NI Det. PS Turn On Pwr Lvl	N/A
Instrument Fail. Mode	LOW
Temp. Comp. for DP Xmtrs	N/A
Level Reference Leg	N/A
Unique System Desc.	Monitor is automatically isolated prior to allowable limits. Reading would remain high despite isolation. Monitor is offscale high before any release of significant dose. Conversion to meaningful $\mu\text{Ci/sec}$ depends largely on background (varies), flow rate, and nuclide mix.

Docket No. 50-213
50-245
50-336
50-423
B14323

Attachment No. 3

Data Point Library (DPL) for
Millstone Unit No. 3

January 1993

DATA POINT LIBRARY REFERENCE FILE

Date:	06/04/92
Reactor Unit:	MS3
Data Feeder:	N/A
ERDS Parameter:	NI POWER RNG
Point Id:	CVMXPWRGE
Site Desc:	REACTOR POWER
ERDS Desc:	NUCLEAR INSTRUMENTS, POWER RANGE
Analog/Digital:	A
Engr. Units:	%
Units Conv:	
Minimum Instr Range	0
Maximum Instr Range	120
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	P
Number of Sensors:	4
How Processed:	VALIDATED AVERAGE
Sensor Loc:	EXCORE NEUTRON DETECTORS
Alarm/Trip Set Points:	HIGH POWER TRIP
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-On Power Level:	N/A
Instrument Failure Mode:	FAIL LOW - ZERO
Temperature Compensation for DP Transmitters:	N
Level Reference Leg:	N/A
System Desc:	SPDS REACTOR POWER LEVEL VALIDATED AVERAGE OF ALL POWER RANGE EXCORE NUCLEAR INSTRUMENTS

DATA POINT LIBRARY REFERENCE FILE

Date:	06/04/92
Reactor Unit:	MSS
Data Feeder:	N/A
ERDS Parameter:	NI INTER RNG
Point Id:	NMI-NM35B
Site Desc:	INTERMEDIATE RANGE
ERDS Desc:	NUC INST., INTERMEDIATE RANGE
Analog/Digital:	A
Engr. Units:	AMPS
Units Conv:	
Minimum Instr Range	1E-11
Maximum Instr Range	1E-3
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	S
Number of Sensors:	1
How Processed:	
Sensor Loc:	EXCORE DETECTORS
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-On Power Level:	N/A
Instrument Failure Mode:	FAIL LOW
Temperature Compensation for DP Transmitters:	N
Level Reference Leg:	N/A
System Desc:	EXCORE NEUTRON MONITOR INT RANGE

DATA POINT LIBRARY REFERENCE FILE

Date: 06/04/92
 Reactor Unit: MS3
 Data Feeder: N/A
 ERDS Parameter: NI SOURC RNG
 Point Id: NMS-NM31F
 Site Desc: SOURCE RANGE
 ERDS Desc: NUCLEAR INSTRUMENTS SOURCE RANGE
 Analog/Digital: A
 Engr. Units: CPS
 Units Conv:
 Minimum Instr Range 0
 Maximum Instr Range 1000000
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens: S
 Number of Sensors: 1
 How Processed:
 Sensor Loc: EXCORE NEUTRON DETECTORS
 Alarm/Trip Set Points:
 NI Detector Power Supply
 Cut-Off Power Level: 1E-10 AMPS IR
 NI Detector Power Supply
 Turn-On Power Level: WHEN P6 CLEARS
 Instrument Failure Mode: FAIL LOW - ZERO
 Temperature Compensation
 for DP Transmitters:
 Level Reference Leg: N/A
 System Desc: SOURCE RANGE NUCLEAR INSTRUMENT

DATA POINT LIBRARY REFERENCE FILE

Date: 06/04/82
 Reactor Unit: MS3
 Data Feeder: N/A
 ERDS Parameter: REAC VES LEV
 Point Id: CVUPLNLLVL
 Site Desc: UPPER PLENUM LEVEL
 ERDS Desc: REACTOR VESSEL WATER LEVEL
 Analog/Digital: A
 Engr. Units: % PLENUM LVL
 Units Conv: SEE SYSTEM DESC FOR LEVEL INFORMATION
 Minimum Instr Range: 0
 Maximum Instr Range: 100
 Zero Point Ref: TFP
 Ref. Notes: ZERO LEVEL IS CORE ALIGNMENT PLATE
 Proc or Sens: P
 Number of Sensors: 12
 How Processed: VALIDATED AVG OF TWO HJTC PROBES
 Sensor Loc: IN CORE
 Alarm/Trip Set Points:
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode: FAIL LOW
 Temperature Compensation
 for DP Transmitters:
 Level Reference Leg: N/A
 System Desc: REACTOR VESSEL LEVEL PROVIDED BY TWO HEATED JUNCTION
 THERMOCOUPLE PROBES. NOT A CONTINUOUS READOUT DEVICE.
 INDICATION IS SENSED AT THE LEVELS OF THE HJTC PAIRS.
 LEVEL ABOVE THE ZERO REF IS: 78.2" = 100%; 61.5" = 82%;
 47" = 64%; 32.5" = 47%; 21.7" = 32%; 10.9" = 19%

DATA POINT LIBRARY REFERENCE FILE

Date: 06/04/92
 Reactor Unit: MS3
 Data Feeder: N/A
 ERDS Parameter: TEMP CORE EX
 Point Id: CVCETMX
 Site Desc: CORE EXIT TEMP. (HIGHEST)
 ERDS Desc: HIGHEST TEMP AT THE CORE EXIT
 Analog/Digital: A
 Engr. Units: DEGF
 Units Conv:
 Minimum Instr Range 200
 Maximum Instr Range 2300
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens: P
 Number of Sensors: 50
 How Processed: HIGHEST OF ALL ACTIVE CET's
 Sensor Loc:
 Alarm/Trip Set Points:
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode: FAILURE DEPENDS ON TYPE OF FAULT
 Temperature Compensation
 for DP Transmitters:
 Level Reference Leg: N/A
 System Desc: CALCULATED VALUE OF ALL THE CET's THAT ARE MONITORED BY
 THE ICC SYSTEM.

DATA POINT LIBRARY REFERENCE FILE

Date:	11/10/92
Reactor Unit:	MS3
Data Feeder:	N/A
ERDS Parameter:	SUB MARGIN
Point Id:	CVSUBCOOL
Site Desc:	SUBCOOLED MARGIN (SPDS VALUE)
ERDS Desc:	SATURATION TEMP - HIGHEST CET
Analog/Digital:	A
Engr. Units:	DEGF
Units Conv:	
Minimum Instr Range	-35
Maximum Instr Range	200
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	P
Number of Sensors:	0
How Processed:	CALULATION BY ICC CABINET
Sensor Loc:	VARIOUS
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-On Power Level:	N/A
Instrument Failure Mode:	DEPENDS ON WHICH INPUT FAILS
Temperature Compensation for DP Transmitters:	
Level Reference Leg:	N/A
System Desc:	CALULATED SUBCOOLING BASED ON INPUTS TO ICC SYSTEM.

DATA POINT LIBRARY REFERENCE FILE

Date:	06/04/92
Reactor Unit:	MS3
Data Feeder:	N/A
ERDS Parameter:	NOT LISTED
Point Id:	CVRCLF1
Site Desc:	RCS FLOW LOOP 1
ERDS Desc:	RCS FLOW LOOP 1
Analog/Digital:	A
Engr. Units:	% FLOW
Units Conv:	
Minimum Instr Range	0
Maximum Instr Range	120
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	P
Number of Sensors:	3
How Processed:	VALIDATED AVG OF THREE FLOW INPUTS
Sensor Loc:	
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-On Power Level:	N/A
Instrument Failure Mode:	FAIL LOW
Temperature Compensation for DP Transmitters:	
Level Reference Leg:	N/A
System Desc:	PERCENT OF FULL FLOW FOR LOOP 1

DATA POINT LIBRARY REFERENCE FILE

Date:	06/04/92
Reactor Unit:	MS3
Data Feeder:	N/A
ERDS Parameter:	NOT LISTED
Point Id:	CVRCLF2
Site Desc:	RCS FLOW LOOP 2
ERDS Desc:	RCS FLOW LOOP 2
Analog/Digital:	A
Engr. Units:	% FLOW
Units Conv:	
Minimum Instr Range	0
Maximum Instr Range	120
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	P
Number of Sensors:	3
How Processed:	VALIDATED AVG OF THREE FLOW INPUTS
Sensor Loc:	
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-On Power Level:	N/A
Instrument Failure Mode:	FAIL LOW
Temperature Compensation for DP Transmitters:	
Level Reference Leg:	N/A
System Desc:	PERCENT OF FULL FLOW FOR LOOP 2

DATA POINT LIBRARY REFERENCE FILE

Date:	06/04/92
Reactor Unit:	MS3
Data Feeder:	N/A
ERDS Parameter:	NOT LISTED
Point Id:	CVRCLF3
Site Desc:	RCS FLOW LOOP 3
ERDS Desc:	RCS FLOW LOOP 3
Analog/Digital:	A
Engr. Units:	% FLOW
Units Conv:	
Minimum Instr Range	0
Maximum Instr Range	120
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	P
Number of Sensors:	3
How Processed:	VALIDATED AVG OF THREE FLOW INPUTS
Sensor Loc:	
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-On Power Level:	N/A
Instrument Failure Mode:	FAIL LOW
Temperature Compensation for DP Transmitters:	
Level Reference Leg:	N/A
System Desc:	PERCENT OF FULL FLOW FOR LOOP 3

DATA POINT LIBRARY REFERENCE FILE

Date:	06/04/92
Reactor Unit:	MS3
Data Feeder:	N/A
ERDS Parameter:	NOT LISTED
Point Id:	CVRCLF4
Site Desc:	RCS FLOW LOOP 4
ERDS Desc:	RCS FLOW LOOP 4
Analog/Digital:	A
Engr. Units:	% FLOW
Units Conv:	
Minimum Instr Range	0
Maximum Instr Range	120
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	P
Number of Sensors:	3
How Processed:	VALIDATED AVG OF THREE FLOW INPUTS
Sensor Loc:	
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-On Power Level:	N/A
Instrument Failure Mode:	FAIL LOW
Temperature Compensation for DP Transmitters:	N
Level Reference Leg:	N/A
System Desc:	PERCENT OF FULL FLOW FOR LOOP 4

DATA POINT LIBRARY REFERENCE FILE

Date: 11/17/92
 Reactor Unit: MS3
 Data Feeder: N/A
 ERDS Parameter: SG LEVEL 1/A
 Point Id: FWS-L1501
 Site Desc: STEAM GEN 1 LEVEL (WR)
 ERDS Desc: STEAM GENERATOR 1 WATER LEVEL
 Analog/Digital: A
 Engr. Units: % LEVEL
 Units Conv: 0 - 100% = 0 - 559"
 Minimum Instr Range: 0
 Maximum Instr Range: 100
 Zero Point Ref: TUBSHT
 Ref. Notes: ZERO IS 22" ABOVE TUBSHT
 Proc or Sens: S
 Number of Sensors: 1
 How Processed:
 Sensor Loc:
 Alarm/Trip Set Points:
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode: VARIOUS - DEPENDS ON STATUS OF REF L⁷G
 Temperature Compensation
 for DP Transmitters: N
 Level Reference Leg: WET
 System Desc: WIDE RANGE STEAM GENERATOR LEVEL
 TOP OF U TUBES IS 63%

DATA POINT LIBRARY REFERENCE FILE

Date: 11/17/82
 Reactor Unit: MS3
 Data Feeder: N/A
 ERDS Parameter: SG LEVEL 2/B
 Point Id: FWS-L1502
 Site Desc: STEAM GEN LEVEL 2 (WR)
 ERDS Desc: STEAM GENERATOR 2 WATER LEVEL
 Analog/Digital: A
 Engr. Units: % LEVEL
 Units Conv: 0 - 100% = 0 - 559"
 Minimum Instr Range: 0
 Maximum Instr Range: 100
 Zero Point Ref: TUBSHT
 Ref. Notes: ZERO IS 22" ABOVE TUBSHT
 Proc or Sens: S
 Number of Sensors: 1
 How Processed:
 Sensor Loc:
 Alarm/Trip Set Points:
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode: VARIOUS - DEPENDS ON STATUS OF REF LEG
 Temperature Compensation
 for DP Transmitters: N
 Level Reference Leg: WET
 System Desc: WIDE RANGE STEAM GENERATOR LEVEL
 TOP OF UTUBES IS 63%

DATA POINT LIBRARY REFERENCE FILE

Date: 11/17/92
 Reactor Unit: MS3
 Data Feeder: N/A
 ERDS Parameter: SG LEVEL 3/C
 Point Id: FWS-L1503
 Site Desc: STEAM GEN LEVEL 3 (WR)
 ERDS Desc: STEAM GENERATOR 3 WATER LEVEL
 Analog/Digital: A
 Engr. Units: % LEVEL
 Units Conv: 0 - 100% = 0 - 559"
 Minimum Instr Range: 0
 Maximum Instr Range: 100
 Zero Point Ref: TUBSHT
 Ref. Notes: ZERO IS 22" ABOVE TUBSHT
 Proc or Sens: S
 Number of Sensors: 1
 How Processed:
 Sensor Loc:
 Alarm/Trip Set Points:
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode: VARIOUS - DEPENDS ON STATUS OF REF LEG
 Temperature Compensation
 for DP Transmitters: N
 Level Reference Leg: WET
 System Desc: WIDE RANGE STEAM GENERATOR LEVEL
 TOP OF U TUBES IS AT 63%

DATA POINT LIBRARY REFERENCE FILE

Date: 11/17/92
 Reactor Unit: MS3
 Data Feeder: N/A
 ERDS Parameter: SG LEVEL 4/D
 Point Id: FWS-L1504
 Site Desc: STEAM GEN LEVEL 4 (WR)
 ERDS Desc: STEAM GENERATOR 4 WATER LEVEL
 Analog/Digital: A
 Engr. Units: % LEVEL
 Units Conv: 0 - 100% = 0 - 559"
 Minimum Instr Range: 0
 Maximum Instr Range: 100
 Zero Point Ref: TUBSHT
 Ref. Notes: ZERO IS 22" ABOVE TUBSHT
 Proc or Sens: S
 Number of Sensors: 1
 How Processed:
 Sensor Loc:
 Alarm/Trip Set Points:
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode: VARIOUS - DEPENDS ON STATUS OF REF LEG
 Temperature Compensation
 for DP Transmitters:
 Level Reference Leg: WET
 System Desc: WIDE RANGE STEAM GENERATOR LEVEL
 TOP OF U TUBES IS AT 63%

DATA POINT LIBRARY REFERENCE FILE

Date:	06/04/92
Reactor Unit:	MS3
Data Feeder:	N/A
ERDS Parameter:	SG PRESS 1/A
Point Id:	CVSGPRES1
Site Desc:	STEAM GEN 1 PRESSURE
ERDS Desc:	STEAM GENERATOR 1 PRESSURE
Analog/Digital:	A
Engr. Units:	PSIG
Units Conv:	
Minimum Instr Range	0
Maximum Instr Range	1300
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	P
Number of Sensors:	3
How Processed:	VALIDATED AVG OF THREE PRESSURE INPUTS
Sensor Loc:	
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-On Power Level:	N/A
Instrument Failure Mode:	FAIL LOW
Temperature Compensation for DP Transmitters:	N
Level Reference leg:	N/A
System Desc:	STEAM GENERATOR PRESSURE

DATA POINT LIBRARY REFERENCE FILE

Date:	06/04/92
Reactor Unit:	MS3
Data Feeder:	N/A
ERDS Parameter:	SG PRESS 2/B
Point Id:	CVSGPRES2
Site Desc:	STEAM GEN 2 PRESSURE
ERDS Desc:	STEAM GENERATOR 2 PRESSURE
Analog/Digital:	A
Engr. Units:	PSIG
Units Conv:	
Minimum Instr Range	0
Maximum Instr Range	1300
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	P
Number of Sensors:	3
How Processed:	VALIDATED AVG OF THREE PRESSURE INPUTS
Sensor Loc:	
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-On Power Level:	N/A
Instrument Failure Mode:	FAIL LOW
Temperature Compensation for DP Transmitters:	N
Level Reference Leg:	N/A
System Desc:	STEAM GENERATOR PRESSURE

DATA POINT LIBRARY REFERENCE FILE

Date:	06/04/92
Reactor Unit:	MS3
Data Feeder:	N/A
ERDS Parameter:	SG PRESS 3/C
Point Id:	CVSGPRESS3
Site Desc:	STEAM GEN 3 PRESSURE
ERDS Desc:	STEAM GENERATOR 3 PRESSURE
Analog/Digital:	A
Engr. Units:	PSIG
Units Conv:	
Minimum Instr Range	0
Maximum Instr Range	1300
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	P
Number of Sensors:	3
How Processed:	VALIDATED AVG OF THREE PRESSURE INPUTS
Sensor Loc:	
Alarm/Trip Set Points:	
NI Detector Power Supply	
Cut-Off Power Level:	N/A
NI Detector Power Supply	
Turn-On Power Level:	N/A
Instrument Failure Mode:	FAIL LOW
Temperature Compensation for DP Transmitters:	N
Level Reference Leg:	N/A
System Desc:	STEAM GENERATOR PRESSURE

DATA POINT LIBRARY REFERENCE FILE

Date:	06/04/92
Reactor Unit:	MS3
Data Feeder:	N/A
ERDS Parameter:	SG PRESS 4/D
Point Id:	CVSGPRES4
Site Desc:	STEAM GEN 4 PRESSURE
ERDS Desc:	STEAM GENERATOR 4 PRESSURE
Analog/Digital:	A
Engr. Units:	PSIG
Units Conv:	
Minimum Instr Range	0
Maximum Instr Range	1300
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	P
Number of Sensors:	3
How Processed:	VALIDATED AVG OF THREE PRESSURE INPUTS
Sensor Loc:	
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-On Power Level:	N/A
Instrument Failure Mode:	FAIL LOW
Temperature Compensation for DP Transmitters:	N
Level Reference Leg:	N/A
System Desc:	STEAM GENERATOR PRESSURE

DATA POINT LIBRARY REFERENCE FILE

Date: 06/04/92
 Reactor Unit: MS3
 Data Feeder: N/A
 ERDS Parameter: MN FD FL 1/A
 Point Id: CVFWFLOW1
 Site Desc: SG1 MAIN FW FLOW
 ERDS Desc: STM GEN 1 MAIN FEEDWATER FLOW
 Analog/Digital: A
 Engr. Units: KLB/HR
 Units Conv:
 Minimum Instr Range: 0
 Maximum Instr Range: 5000
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens: P
 Number of Sensors: 2
 How Processed: VALIDATED AVG OF TWO FEED FLOW INPUTS
 Sensor Loc:
 Alarm/Trip Set Points:
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode: FAIL LOW
 Temperature Compensation
 for DP Transmitters: N
 Level Reference Leg: N/A
 System Desc: MAIN FEEDWATER FLOW

DATA POINT LIBRARY REFERENCE FILE

Date:	06/04/92
Reactor Unit:	MS3
Data Feeder:	N/A
ERDS Parameter:	MN FD FL 2/B
Point Id:	CVFWFLOW2
Site Desc:	SG2 MAIN FW FLOW
ERDS Desc:	STM GEN 2 MAIN FEEDWATER FLOW
Analog/Digital:	A
Engr. Units:	KLB/HR
Units Conv:	
Mini Instr Range	0
Maximum Instr Range	5000
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	F
Number of Sensors:	2
How Processed:	VALIDATED AVG OF TWO FEED FLOW INPUTS
Sensor Loc:	
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-On Power Level:	N/A
Instrument Failure Mode:	FAIL LOW
Temperature Compensation for DP Transmitters:	N
Level Reference Leg:	N/A
System Desc:	MAIN FEEDWATER FLOW

DATA POINT LIBRARY REFERENCE FILE

Date:	06/04/92
Reactor Unit:	MS3
Data Feeder:	N/A
ERDS Parameter:	MN FD FL 3/C
Point Id:	CVFWFLOW3
Site Desc:	SG 3 MAIN FW FLOW
ERDS Desc:	STM GEN 3 MAIN FEEDWATER FLOW
Analog/Digital:	A
Engr. Units:	KLB/HR
Units Conv:	
Minimum Instr Range	0
Maximum Instr Range	5000
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	F
Number of Sensors:	2
How Processed	VALIDATED AVG OF TWO FEED FLOW INPUTS
Sensor Loc:	???
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-On Power Level:	N/A
Instrument Failure Mode:	FAIL LOW
Temperature Compensation for DP Transmitters:	N
Level Reference Leg:	N/A
System Desc:	MAIN FEEDWATER FLOW

DATA POINT LIBRARY REFERENCE FILE

Date:	06/04/92
Reactor Unit:	MS3
Data Feeder:	N/A
ERDS Parameter:	MN FD FL 4/D
Point Id:	CVFWFLOW4
Site Desc:	SG 4 MAIN FW FLOW
ERDS Desc:	STM GEN 4 MAIN FEEDWATER FLOW
Analog/Digital:	A
Engr. Units:	KLB/HR
Units Conv:	
Minimum Instr Range	0
Maximum Instr Range	5000
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	P
Number of Sensors:	2
How Processed:	VALIDATED AVG OF TWO FEED FLOW INPUTS
Sensor Loc:	
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-On Power Level:	N/A
Instrument Failure Mode:	FAIL LOW
Temperature Compensation for DP Transmitters:	N
Level Reference Leg:	N/A
System Desc:	MAIN FEEDWATER FLOW

DATA POINT LIBRARY REFERENCE FILE

Date:	06/04/92
Reactor Unit:	MS3
Data Feeder:	N/A
ERDS Parameter:	AX FD FL 1/A
Point Id:	CVAUXFW1
Site Desc:	SG 1 AUX FW FLOW
ERDS Desc:	STM GEN 1 AUXILIARY FW FLOW
Analog/Digital:	A
Engr. Units:	GPM
Units Conv:	
Minimum Instr Range	0
Maximum Instr Range	350
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	P
Number of Sensors:	2
How Processed:	VALIDATED AVG OF TWO AUX FEED FL INPUTS
Sensor Loc:	
Alarm/Trip Set Points:	
NI Detector Power Supply	
Cut-Off Power Level:	N/A
NI Detector Power Supply	
Turn-On Power Level:	N/A
Instrument Failure Mode:	FAIL LOW
Temperature Compensation	
for DP Transmitters:	N
Level Reference Leg:	N/A
System Desc:	AUXILIARY FEEDWATER FLOW

DATA POINT LIBRARY REFERENCE FILE

Date:	06/04/92
Detector Unit:	MS3
Feeder:	N/A
ERDS Parameter:	AX FD FL 2/B
Point Id:	CVAUXFW2
Site Desc:	SG 2 AUX FW FLOW
ERDS Desc:	STM GEN 2 AUXILIARY FW FLOW
Analog/Digital:	A
Engr. Units:	GPM
Units Conv:	
Minimum Instr Range	0
Maximum Instr Range	350
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	P
Number of Sensors:	2
How Processed:	VALIDATED AVG OF TWO AUX FEED FL INPUTS
Sensor Loc:	
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-On Power Level:	N/A
Instrument Failure Mode:	FAIL LOW
Temperature Compensation for DP Transmitters:	N
Level Reference Leg:	N/A
System Desc:	AUXILIARY FEEDWATER FLOW

DATA POINT LIBRARY REFERENCE FILE

Date:	06/04/92
Reactor Unit:	MS3
Data Feeder:	N/A
ERDS Parameter:	AX FD FL 3/C
Point Id:	CVAUXFW3
Site Desc:	SG 3 AUX FW FLOW
ERDS Desc:	STM GEN 3 AUXILIARY FW FLOW
Analog/Digital:	A
Engr. Units:	GPM
Units Conv:	
Minimum Instr Range	0
Maximum Instr Range	350
Zero Point Ref:	
Ref. Note	
Proc or Set:	P
Number of Sensors:	2
How Processed:	VALIDATED AVG OF TWO AUX FEED FL INPUTS
Sensor Loc:	
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-On Power Level:	N/A
Instrument Failure Mode:	FAIL LOW
Temperature Compensation for DP Transmitters:	N
Level Reference Leg:	N/A
System Desc:	AUXILIARY FEEDWATER FLOW

DATA POINT LIBRARY REFERENCE FILE

Date: 06/04/92
 Reactor Unit: MS3
 Data Feeder: N/A
 ERDS Parameter: AX FD FL 4/D
 Point Id: CVAUXFW4
 Site Desc: SG 4 AUX FW FLOW
 ERDS Desc: STM GEN 4 AUXILIARY FW FLOW
 Analog/Digital: A
 Engr. Units: GPM
 Units Conv:
 Minimum Instr Range 0
 Maximum Instr Range 350
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens: P
 Number of Sensors: 2
 How Processed: VALIDATED AVG OF TWO AUX FEED FL INPUTS
 Sensor Loc:
 Alarm/Trip Set Points:
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode: FAIL LOW
 Temperature Compensation
 for DP Transmitters: N
 Level Reference Leg: N/A
 System Desc: AUXILIARY FEEDWATER FLOW

DATA POINT LIBRARY REFERENCE FILE

Date: 06/04/92
 Reactor Unit: MS3
 Data Feeder: N/A
 ERDS Parameter: HL TEMP 1/A
 Point Id: RCS-T413A
 Site Desc: RCS HOT LEG TEMP (WR)
 ERDS Desc: STM GEN 1 INLET TEMPERATURE
 Analog/Digital: A
 Engr. Units: DEGF
 Units Conv:
 Minimum Instr Range 0
 Maximum Instr Range 700
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens: S
 Number of Sensors: 1
 How Processed:
 Sensor Loc: RCS HOT LEG
 Alarm/Trip Set Points:
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode: FAIL HIGH
 Temperature Compensation
 for DP Transmitters:
 Level Reference Leg: N/A
 System Desc: RCS HOT LEG TEMPERATURE

DATA POINT LIBRARY REFERENCE FILE

Date:	08/04/92
Reactor Unit:	MS3
Data Feeder:	N/A
ERDS Parameter:	HL TEMP 2/B
Point Id:	RCS-T423A
Site Desc:	RCS HOT LEG TEMP (WR)
ERDS Desc:	STM GEN 2 INLET TEMPERATURE
Analog/Digital:	A
Engr. Units:	DEGF
Units Conv:	
Minimum Instr Range	0
Maximum Instr Range	700
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	S
Number of Sensors:	1
How Processed:	
Sensor Loc:	RCS HOT LEG
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-On Power Level:	N/A
Instrument Failure Mode:	FAIL HIGH
Temperature Compensation for DP Transmitters:	
Level Reference Leg:	N/A
System Desc:	RCS HOT LEG TEMPERATURE

DATA POINT LIBRARY REFERENCE FILE

Date: 06/04/92
 Reactor Unit: MS3
 Data Feeder: N/A
 ERDS Parameter: HL TEMP 3/C
 Point Id: RCS-T433A
 Site Desc: RCS HOT LEG TEMP (WR)
 ERDS Desc: STM GEN 3 INLET TEMPERATURE
 Analog/Digital: A
 Engr. Units: DEGF
 Units Conv:
 Minimum Instr Range 0
 Maximum Instr Range 700
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens: S
 Number of Sensors: 1
 How Processed:
 Sensor Loc: RCS HOT LEG
 Alarm/Trip Set Points:
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode: FAIL HIGH
 Temperature Compensation
 for DP Transmitters:
 Level Reference Leg: N/A
 System Desc: RCS HOT LEG TEMPERATURE

DATA POINT LIBRARY REFERENCE FILE

Date: 06/04/92
 Reactor Unit: MS3
 Data Feeder: N/A
 ERDS Parameter: HL TEMP 4/D
 Point Id: RCS-T443A
 Site Desc: RCS HOT LEG TEMP (WR)
 ERDS Desc: STM GEN 4 INLET TEMPERATURE
 Analog/Digital: A
 Engr. Units: DEGF
 Units Conv:
 Minimum Instr Range 0
 Maximum Instr Range 700
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens: S
 Number of Sensors: 1
 How Processed:
 Sensor Loc: RCS HOT LEG
 Alarm/Trip Set Points:
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode: FAIL HIGH
 Temperature Compensation
 for DP Transmitters:
 Level Reference Leg: N/A
 System Desc: RCS HOT LEG TEMPERATURE

DATA POINT LIBRARY REFERENCE FILE

Date: 06/04/92
 Reactor Unit: MS3
 Data Feeder: N/A
 ERDS Parameter: CL TEMP 1/A
 Point Id: RCS-T413B
 Site Desc: RCS COLD LEG TEMP (WR)
 ERDS Desc: STM GEN 1 OUTLET TEMPERATURE
 Analog/Digital: A
 Engr. Units: DEGF
 Units Conv:
 Minimum Instr Range 0
 Maximum Instr Range 700
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens: S
 Number of Sensors: 1
 How Processed:
 Sensor Loc: RCS COLD LEG
 Alarm/Trip Set Points:
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode: FAIL HIGH
 Temperature Compensation
 for DP Transmitters:
 Level Reference Leg: N/A
 System Desc: RCS COLD LEG TEMPERATURE

DATA POINT LIBRARY REFERENCE FILE

Date: 06/04/92
 Reactor Unit: MS3
 Data Feeder: N/A
 ERDS Parameter: CL TEMP 2/B
 Point Id: RCS-T423B
 Site Desc: RCS COLD LEG TEMP (WR)
 ERDS Desc: STM GEN 2 OUTLET TEMPERATURE
 Analog/Digital: A
 Engr. Units: DEGF
 Units Conv:
 Minimum Instr Range 0
 Maximum Instr Range 700
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens: S
 Number of Sensors: 1
 How Processed:
 Sensor Loc: RCS COLD LEG
 Alarm/Trip Set Points:
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode: FAIL HIGH
 Temperature Compensation
 for DP Transmitters:
 Level Reference Leg: N/A
 System Desc: RCS COLD LEG TEMPERATURE

DATA POINT LIBRARY REFERENCE FILE

Date:	06/04/92
Reactor Unit:	MS3
Data Feeder:	N/A
ERDS Parameter:	CL TEMP 3/C
Point Id:	RCS-T433B
Site Desc:	RCS COLD LEG TEMP (WR)
ERDS Desc:	STM GEN 3 OUTLET TEMPERATURE
Analog/Digital:	A
Engr. Units:	DEGF
Units Conv:	
Minimum Instr Range	0
Maximum Instr Range	700
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	S
Number of Sensors:	1
How Processed:	
Sensor Loc:	RCS COLD LEG
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-On Power Level:	N/A
Instrument Failure Mode:	FAIL HIGH
Temperature Compensation for DP Transmitters:	
Level Reference Leg:	N/A
System Desc:	RCS COLD LEG TEMPERATURE

DATA POINT LIBRARY REFERENCE FILE

Date:	06/04/92
Reactor Unit:	MS3
Data Feeder:	N/A
ERDS Parameter:	CL TEMP 4/D
Point Id:	RCS-T443B
Site Desc:	RCS COLD LEG TEMP (WR)
ERDS Desc:	STM GEN 4 OUTLET TEMPERATURE
Analog/Digital:	A
Engr. Units:	DEGF
Units Conv:	
Minimum Instr Range	0
Maximum Instr Range	700
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	S
Number of Sensors:	1
How Processed:	
Sensor Loc:	RCS COLD LEG
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-On Power Level:	N/A
Instrument Failure Mode:	FAIL HIGH
Temperature Compensation for DP Transmitters:	
Level Reference Leg:	N/A
System Desc:	RCS COLD LEG TEMPERATURE

DATA POINT LIBRARY REFERENCE FILE

Date:	06/04/92
Reactor Unit:	MS3
Data Feeder:	N/A
ERDS Parameter:	RCS PRESSURE
Point Id:	CVRCSPRES
Site Desc:	RCS/PRESS COMBINED PRESSURE
ERDS Desc:	REACTOR COOLANT SYSTEM PRESSURE
Analog/Digital:	A
Engr. Units:	PSIA
Units Conv:	
Minimum Instr Range	0
Maximum Instr Range	3000
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	P
Number of Sensors:	6
How Processed:	VALIDATED AVERAGE OF LOOP AND PZR PRESS
Sensor Loc:	RCS LOOPS AND PRESSURIZER
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-On Power Level:	N/A
Instrument Failure Mode:	FAIL LOW
Temperature Compensation for DP Transmitters:	
Level Reference Leg:	N/A
System Desc:	COMBINED WIDE RANGE RCS SYSTEM PRESSURE

DATA POINT LIBRARY REFERENCE FILE

Date: 11/17/92
 Reactor Unit: MS3
 Data Feeder: N/A
 ERDS Parameter: PRZR LEVEL
 Point Id: CVPZRLVL
 Site Desc: PRESSURIZER LEVEL
 ERDS Desc: PRESSURIZER LEVEL
 Analog/Digital: A
 Engr. Units: % LEVEL
 Units Conv: 0 - 100% = 0 - 520"
 Minimum Instr Range 0
 Maximum Instr Range 100
 Zero Point Ref: COMPLX
 Ref. Notes: ZERO POINT IS 62 INCHES FROM THE BOTTOM
 Proc or Sens: P
 Number of Sensors: 3
 How Processed: VALIDATED AVERAGE OF THREE PRZR LEVELS
 Sensor Loc: PRESSURIZER
 Alarm/Trip Set Points:
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode: VARIOUS DUE TO CONDITION OF REF LEG
 Temperature Compensation
 for DP Transmitters:
 Level Reference Leg: WET
 System Desc: PRESSURIZER WATER LEVEL
 TOP OF HEATERS IS AT 7%

DATA POINT LIBRARY REFERENCE FILE

Date:	06/04/92
Reactor Unit:	MS3
Data Feeder:	N/A
ERDS Parameter:	RCS CHG/MU
Point Id:	CHS-F121
Site Desc:	CHARGING FLOW
ERDS Desc:	PRIMARY SYSTEM CHARGING FLOW
Analog/Digital:	A
Engr. Units:	GPM
Units Conv:	
Minimum Instr Range	0
Maximum Instr Range	200
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	S
Number of Sensors:	1
How Processed:	
Sensor Loc:	
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-On Power Level:	N/A
Instrument Failure Mode:	
Temperature Compensation for DP Transmitters:	
Level Reference Leg:	N/A
System Desc:	CHARGING FLOW

DATA POINT LIBRARY REFERENCE FILE

Date: 06/04/92
 Reactor Unit: MS3
 Data Feeder: N/A
 ERDS Parameter: CTMNT SMP WR
 Point Id: CVCTSMPLVL
 Site Desc: CTMT SUMP LEVEL
 ERDS Desc: CONTAINMENT SUMP WR LEVEL
 Analog/Digital: A
 Engr. Units: FEET
 Units Conv:
 Minimum Instr Range 1
 Maximum Instr Range 17
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens:
 Number of Sensors: 2
 How Processed: VALIDATED AVERAGE OF TWO LEVEL SIGNALS
 Sensor Loc: CONTAINMENT SUMP
 Alarm/Trip Set Points:
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode: LOW 1 FOOT
 Temperature Compensation
 for DP Transmitters:
 Level Reference Leg:
 System Desc: CONTAINMENT SUMP LEVEL

DATA POINT LIBRARY REFERENCE FILE

Date: 06/04/82
 Reactor Unit: MS3
 Data Feeder: N/A
 ERDS Parameter: COND A/E RAD
 Point Id: CVARC21
 Site Desc: CONDENSER AIR EJECTOR MONITOR
 ERDS Desc: CONDENSER AIR EJEC RADIOACTIVITY
 Analog/Digital: A
 Engr. Units: uCi/CC
 Units Conv:
 Minimum Instr Range E-5
 Maximum Instr Range E+0
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens:
 Number of Sensors: 1
 How Processed:
 Sensor Loc: TURBINE BUILDING
 Alarm/Trip Set Points: VARIABLE
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode: LOW
 Temperature Compensation
 for DP Transmitters:
 Level Reference Leg: N/A
 System Desc: CONDENSER AIR EJECTOR RADIATION MONITOR
 CONVERSION FACTOR IS 1.2E-7 uCi/CCPM - THIS IS BASED ON
 ASSUMED MIX OF APPROX. 70% Xe133, 9% Xe135, 8% Kr88,
 13% OTHER
 DISCHARGE IS TO MP1 STACK. ALL RELEASE RATE ESTIMATES

DATA POINT LIBRARY REFERENCE FILE

Date: 11/10/92
 Reactor Unit: MS3
 Data Feeder: N/A
 ERDS Parameter: CNTMNT RAD
 Point Id: CVRMS04
 Site Desc: CTMT RADIATION
 ERDS Desc: RADIATION LEVEL IN THE CNTMNT
 Analog/Digital: A
 Engr. Units: R/HR
 Units Conv:
 Minimum Instr Range 1E+0
 Maximum Instr Range 1E+8
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens: S
 Number of Sensors: 2
 How Processed:
 Sensor Loc: IN CONTAINMENT
 Alarm/Trip Set Points: 5 R/H
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode:
 Temperature Compensation
 for DP Transmitters:
 Level Reference Leg: N/A
 System Desc: CONTAINMENT RADIATION MONITOR
 GENERAL RADIATION CONTAINMENT MONITOR

DATA POINT LIBRARY REFERENCE FILE

Date: 06/04/92
 Reactor Unit: MS3
 Data Feeder: N/A
 ERDS Parameter: MAIN SL 1/A
 Point Id: CVMSS75
 Site Desc: MAIN STEAM RELEASE MON
 ERDS Desc: STM GEN 1 STEAM LINE RAD LEVEL
 Analog/Digital: A
 Engr. Units: uCi/CC
 Units Conv:
 Minimum Instr Range: 1E-3
 Maximum Instr Range: 1E+3
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens: S
 Number of Sensors: 1
 How Processed:
 Sensor Loc: MAIN STEAM BUILDING
 Alarm/Trip Set Points: 0.7 uCi/CC
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode: LOW
 Temperature Compensation
 for DP Transmitters:
 Level Reference Leg: N/A
 System Desc: STEAM LINE RADIATION MONITOR
 CONVERSION FACTOR IS 0.037 uCi/CC PER mR/HR BASED ON 1 HR
 MIX. CONVERSION TO RELEASE RATE DEPENDS ON FLOW AND NUCLIDE
 MIX. ASSUMING 6000 CFM DEFAULT FLOW, RELEASE IS 2.8 Ci/SEC
 PER uCi/CC

DATA POINT LIBRARY REFERENCE FILE

Date: 06/04/92
 Reactor Unit: MS3
 Data Feeder: N/A
 ERDS Parameter: MAIN SL 2/B
 Point Id: CVMSS76
 Site Desc: MAIN STEAM RELEASE MON
 ERDS Desc: STM GEN 2 STEAM LINE RAL LEVEL
 Analog/Digital: A
 Engr. Units: uCi/CC
 Units Conv:
 Minimum Instr Range 1E-3
 Maximum Instr Range 1E+3
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens: S
 Number of Sensors: 1
 How Processed:
 Sensor Loc: MAIN STEAM BUILDING
 Alarm/Trip Set Points: 0.7 uCi/CC
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode: LOW
 Temperature Compensation
 for DP Transmitters:
 Level Reference Leg: N/A
 System Desc: STEAM LINE RADIATION MONITOR
 CONVERSION FACTOR IS 0.037 uCi/CC PER mR BASED ON 1 HR
 MIX. CONVERSION TO RELEASE RATE DEPENDS ON FLOW AND NUCLIDE
 MIX. ASSUMING 6000 CFM DEFAULT FLOW, RELEASE IS 2.8 Ci/SEC
 PER uCi/CC

DATA POINT LIBRARY REFERENCE FILE

Date: 06/04/92
 Reactor Unit: MS3
 Data Feeder: N/A
 ERDS Parameter: MAIN SL 3/C
 Point Id: CVMSS77
 Site Desc: MAIN STEAM RELEASE MON
 ERDS Desc: STM GEN 3 STEAM LINE RAD LEVEL
 Analog/Digital: A
 Engr. Units: uCi/CC
 Units Conv:
 Minimum Instr Range 1E-3
 Maximum Instr Range 1E+3
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens: S
 Number of Sensors: 1
 How Processed:
 Sensor Loc: MAIN STEAM BUILDING
 Alarm/Trip Set Points: 0.7 uCi/CC
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode: LOW
 Temperature Compensation
 for DP Transmitters:
 Level Reference Leg: N/A
 System Desc: STEAM LINE RADIATION MONITOR
 CONVERSION FACTOR IS 0.037 uCi/CC PER mR/HR BASED ON 1 HR
 MIX. CONVERSION TO RELEASE RATE DEPENDS ON FLOW AND NUCLIDE
 MIX. ASSUMING 6000 CFM DEFAULT FLOW, RELEASE IS 2.8 Ci/SEC
 PER uCi/CC

DATA POINT LIBRARY REFERENCE FILE

Date: 06/04/92
 Reactor Unit: MS3
 Data Feeder: N/A
 ERDS Parameter: MAIN SL 4/D
 Point Id: CVMSS78
 Site Desc: MAIN STEAM RELEASE MON
 ERDS Desc: STM GEN 4 STEAM LINE RAD LEVEL
 Analog/Digital: A
 Engr. Units: uCi/CC
 Units Conv:
 Minimum Instr Range 1E-3
 Maximum Instr Range 1E+3
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens: S
 Number of Sensors: 1
 How Processed:
 Sensor Loc: MAIN STEAM BUILDING
 Alarm/Trip Set Points: 0.7 uCi/C
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode: LOW
 Temperature Compensation
 for DP Transmitters:
 Level Reference Leg: N/A
 System Desc: STEAM LINE RADIATION MONITOR
 CONVERSION FACTOR IS 0.037 uCi/CC PER mR/HR BASED ON 1 HR
 MIX. CONVERSION TO RELEASE RATE DEPENDS ON FLOW AND NUCLIDE
 MIX. ASSUMING 6000 CFM DEFAULT FLOW, RELEASE IS 2.8 Ci/SEC
 PER uCi/CC

DATA POINT LIBRARY REFERENCE FILE

Date:	06/04/92
Reactor Unit:	MS3
Data Feeder:	N/A
ERDS Parameter:	NOT LISTED
Point Id:	CVSSR08
Site Desc:	SG BLOWDOWN MON
ERDS Desc:	STM GEN BLOWDOWN RAD LEVEL
Analog/Digital:	A
Engr. Units:	uCI/CC
Units Conv:	
Minimum Instr Range	1E-6
Maximum Instr Range	1E-1
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	S
Number of Sensors:	1
How Processed:	
Sensor Loc:	AUX BUILDING
Alarm/Trip Set Points:	VARIABLE
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-On Power Level:	N/A
Instrument Failure Mode:	LOW
Temperature Compensation for DP Transmitters:	
Level Reference Leg:	N/A
System Desc:	<p>BLOWDOWN RADIATION MONITOR COMBINES SAMPLE FROM ALL 4 STEAM GENERATORS. AIR EJECTOR MONITOR IS MUCH MORE SENSITIVE TO TUBE FALIURES AND HENCE BLOWDOWN SHOULD BE ISOLATED BEFORE SIGNIFICANT RELEASE IS DETECTED. BLOWDOWN MONITOR WILL ISOLATE BEFORE</p>

DATA POINT LIBRARY REFERENCE FILE

Date:	06/04/92
Reactor Unit:	MS3
Data Feeder:	N/A
ERDS Parameter:	CTMNT PRESS
Point Id:	LMS-P24A
Site Desc:	CONTAINMENT PRESSURE
ERDS Desc:	CONTAINMENT PRESSURE
Analog/Digital:	A
Engr. Units:	PSIA
Units Conv:	
Minimum Instr Range	0
Maximum Instr Range	200
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	S
Number of Sensors:	1
How Processed:	
Sensor Loc:	
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-On Power Level:	N/A
Instrument Failure Mode:	LOW
Temperature Compensation for DP Transmitters:	
Level Reference Leg:	N/A
System Desc:	ABSOLUTE CONTAINMENT PRESSURE

DATA POINT LIBRARY REFERENCE FILE

Date:	06/04/92
Reactor Unit:	MS3
Data Feeder:	N/A
ERDS Parameter:	CTMNT TEMP
Point Id:	CVCTMAX
Site Desc:	CONTAINMENT HIGHEST TEMPERATURE
ERDS Desc:	MAX CONTAINMENT TEMPERATURE
Analog/Digital:	A
Engr. Units:	DEGF
Units Conv:	
Minimum Instr Range	0
Maximum Instr Range	200
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	P
Number of Sensors:	23
How Processed:	
Sensor Loc:	CONTAINMENT
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-On Power Level:	N/A
Instrument Failure Mode:	LOW
Temperature Compensation for DP Transmitters:	
Level Reference Leg:	N/A
System Desc:	HIGHEST CONTAINMENT TEMPERATURE OF ALL SENSORS

DATA POINT LIBRARY REFERENCE FILE

Date: 06/04/92
 Reactor Unit: MS3
 Data Feeder: N/A
 ERDS Parameter: H2 CONC
 Point Id: SSP-A58A
 Site Desc: CONTAINMENT HYDROGEN CONC
 ERDS Desc: CONTAINMENT HYDROGEN CONC
 Analog/Digital: A
 Engr. Units: % H2
 Units Conv:
 Minimum Instr Range 0
 Maximum Instr Range 10
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens: S
 Number of Sensors: 1
 How Processed:
 Sensor Loc:
 Alarm/Trip Set Points:
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode: LOW
 Temperature Compensation
 for DP Transmitters:
 Level Reference Leg: N/A
 System Desc: CONTAINMENT HYDROGEN CONCENTRATION

DATA POINT LIBRARY REFERENCE FILE

Date: 06/04/92
 Reactor Unit: MS3
 Data Feeder: N/A
 ERDS Parameter: WIND SPEED
 Point Id: CVWS142MPH
 Site Desc: WIND SPEED (142 FEET)
 ERDS Desc: WIND SPEED AT THE REACTOR SITE
 Analog/Digital: A
 Engr. Units: MPH
 Units Conv:
 Minimum Instr Range 0
 Maximum Instr Range 100
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens: P
 Number of Sensors: 1
 How Processed:
 Sensor Loc:
 Alarm/Trip Set Points:
 NI Detector Power Supply
 Cut-Off Power Level: N/A
 NI Detector Power Supply
 Turn-On Power Level: N/A
 Instrument Failure Mode: LOW
 Temperature Compensation
 for DP Transmitters:
 Level Reference Leg: N/A
 System Desc: WIND SPEED AT THE 142 LEVEL ON THE MET TOWER
 VALUE IS A 15 MINUTE AVERAGE

DATA POINT LIBRARY REFERENCE FILE

Date:	11/17/92
Reactor Unit:	MS3
Data Feeder:	N/A
ERDS Parameter:	WIND DIR
Point Id:	CVWD142
Site Desc:	WIND DIRECTION (142 FEET)
ERDS Desc:	WIND DIRECTION AT THE RX SITE
Analog/Digital:	A
Engr. Units:	DEG
Units Conv:	
Minimum Instr Range	0
Maximum Instr Range	360
Zero Point Ref:	
Ref. Notes:	
Proc or Sens:	P
Number of Sensors:	1
How Processed:	
Sensor Loc:	
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-Off Power Level:	N/A
NI Detector Power Supply Turn-On Power Level:	N/A
Instrument Failure Mode:	AS IS
Temperature Compensation for DP Transmitters:	
Level Reference Leg:	N/A
System Desc:	WIND DIRECTION AT THE 142 LEVEL ON THE MET TOWER VALUE IS A 15 MINUTE AVERAGE. THIS IS A STANDARD WIND DIRECTION INSTRUMENT INDICATING THE DIRECTION THE WIND IS COMING FROM.

DATA POINT LIBRARY REFERENCE FILE

Date: 07/16/92
 Reactor Unit: MS3
 Data Feeder: N/A
 ERDS Parameter: STAB CLASS
 Point Id: CVDT142F
 Site Desc: DELTA TEMP (142 FT)
 ERDS Desc: AIR STABILITY AT THE RX SITE
 Analog/Digital: A
 Engr. Units: DEGF
 Units Conv:
 Minimum Instr Range -10
 Maximum Instr Range 18
 Zero Point Ref:
 Ref. Notes:
 Proc or Sens: P
 Number of Sensors: 2
 How Processed: DELTA TEMP BETWEEN 142FT AND 33FT
 Sensor Loc: STATION MET TOWER
 Alarm/Trip Set Points:
 NI Detector Power Supply
 Cut-Off Power Level:
 NI Detector Power Supply
 Turn-On Power Level:
 Instrument Failure Mode: FAIL LOW
 Temperature Compensation
 for DP Transmitters: N
 Level Reference Leg: N/A
 System Desc: VALUE IS A 15 MINUTE AVERAGE OF THE DIFFERENCE BETWEEN THE
 142 AND 33 FOOT LEVEL TEMPERATURES ON THE STATION MET TOWER

DATA POINT LIBRARY REFERENCE FILE

Date: 11/17/92
 Reactor Unit: MS3
 Data Feeder: N/A
 ERDS Parameter: BWST LEVEL
 Point Id: QSS-L930
 Site Desc: REFUELING WATER STORAGE TANK
 ERDS Desc: BORATED WATER STORAGE TANK LEVEL
 Analog/Digital: A
 Engr. Units: GAL
 Units Conv:
 Minimum Instr Range: 0
 Maximum Instr Range: 1200000
 Zero Point Ref: TNKBOT
 Ref. Notes:
 Proc or Sens: S
 Number of Sensors: 1
 How Processed:
 Sensor Loc:
 Alarm/Trip Set Points:
 NI Detector Power Supply
 Cut-Off Power Level:
 NI Detector Power Supply
 Turn-On Power Level:
 Instrument Failure Mode: LOW
 Temperature Compensation
 for DP Transmitters: N
 Level Reference Leg: WET
 System Desc: REFUELING WATER STORAGE TANK LEVEL
 READOUT IS DIRECT IN GALLONS
 THIS IS THE PRIMARY SOURCE OF BORATED WATER FOR CHARGING
 INTO THE RCS

Docket No. 50-213
50-245
50-336
50-423
B14323

Attachment No. 4

Data Point Library (DPL) for
Haddam Neck Plant

January 1993

Date 4/21/92 Reactor Unit HN1

Data Feeder N/A

NRC ERDS Parameter NI POWER RNG

Point ID CPWRGE

Plant Spec Point Desc. POWER RANGE

Generic|Cond Desc. Nuclear Instruments, Power Range

Analog|Digital A

Engr Units|Dig States %

Engr Units Conversion

Min Instrument Range 0

Max Instrument Range 120

Zero Point Reference

Reference Point Notes

PROC | SENS P

Number of Sensors 4

How Processed Validated Average

Sensor Locations Containment

Alarm|Trip Setpoints 101.5

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode LOW

Temp. Comp. for DP Xmtrs N

Level Reference Leg N/A

Unique System Desc. Power range indication is developed from the validated average of four separate channels of nuclear instrumentation which use ionization chambers to sense neutron flux proportional to reactor power.

NRC ERDS Parameter NI INTER RNG

Point ID WR-1

Plant Spec Point Desc. WIDE RANGE

Generic|Cond Desc. Nuclear Instruments, Intermediate Range

Analog|Digital A

Engr Units|Dig States %

Engr Units Conversion

Min Instrument Range E-8

Max Instrument Range 100

Zero Point Reference

Reference Point Notes

PROC | SENS S

Number of Sensors 1

How Processed

Sensor Locations Containment

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode

Temp. Comp. for DP Xmtrs

Level Reference Leg N/A

Unique System Desc. The wide range nuclear instrument channel uses fission chambers to monitor neutron flux from the source range to power range. Pulse counting is used in the source range, and Campbelling is used from the intermediate to the power range. Electronic switching is used to make the transition.

Date 4/21/92

Reactor Unit HN1

Data Feeder N/A

NRC ERDS Parameter NI SOURC RNG

Point ID SR-1

Plant Spec Point Desc. SOURCE RANGE

Generic|Cond Desc. Nuclear Instruments, Source Range

Analog|Digital A

Engr Units|Dig States CPS

Engr Units Conversion

Min Instrument Range 1

Max Instrument Range E+6

Zero Point Reference

Reference Point Notes

PROC | SENS S

Number of Sensors 1

How Processed

Sensor Locations Containment

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode LOW

Temp. Comp. for DP Xmtrs

Level Reference Leg N/A

Unique System Desc. The source range nuclear instrument channel uses fission chambers to monitor neutron flux in the source range.

Date	4/21/92	Reactor Unit	HN1	Data Feeder	N/A
NRC ERDS Parameter	REAC VES LEV				
Point ID	CHDLVL				
Plant Spec Point Desc.	REACTOR HEAD LEVEL				
Generic Cond Desc.	Reactor Vessel Water Level				
Analog Digital	A				
Engr Units Dig States	%				
Engr Units Conversion	See Description.				
Min Instrument Range	0				
Max Instrument Range	100				
Zero Point Reference	LWHEAD				
Reference Point Notes	Referenced to reactor vessel flange				
PROC SENS	P				
Number of Sensors	2				
How Processed	Other				
Sensor Locations	Containment				
Alarm Trip Setpoints	LO:10; HI:101				
NI Det. PS Cut Off Pwr Lvl	N/A				
NI Det. PS Turn On Pwr Lvl	N/A				
Instrument Fail. Mode	Varies				
Temp. Comp. for DP Xmtrs	N				
Level Reference Leg	N/A				
Unique System Desc.	Two Heated Junction Thermocouple sensors provide covered/uncovered indication. Possible displayed values are: 0, 49, 100% , referenced to RV flange. 100% is = 72 inches above the RV flange. The RV flange is =125 inches above the Fuel Alignment plate.				

Date 4/21/92	Reactor Unit HN1	Data Feeder N/A
NRC ERDS Parameter	TEMP CORE EX	
Point ID	CCETMAX	
Plant Spec Point Desc.	MAXIMUM CET TEMP	
Generic Cond Desc.	Highest Temperature at the Core Exit	
Analog Digital	A	
Engr Units Dig States	F	
Engr Units Conversion		
Min Instrument Range	0	
Max Instrument Range	2300	
Zero Point Reference		
Reference Point Notes	Lower Level Instrument Tap; Approx. 18" above tube sheet	
PROC SENS	P	
Number of Sensors	47	
How Processed	Validated Highest	
Sensor Locations	Containment	
Alarm Trip Setpoints		
NI Det. PS Cut Off Pwr Lvl	N/A	
NI Det. PS Turn On Pwr Lvl	N/A	
Instrument Fall. Mode	LOW	
Temp. Comp. for DP Xmtrs	N	
Level Reference Leg	N/A	
Unique System Desc.	Validated maximum of 47 core exit temperature thermocouples.	

Date 4/21/92

Reactor Unit HN1

Data Feeder N/A

NRC ERDS Parameter SUB MARGIN

Point ID CSUBCOOL

Plant Spec Point Desc. SUBCOOLING

Generic|Cond Desc. Saturation Temperature—Highest CET

Analog|Digital A

Engr Units|Dig States DEGF

Engr Units Conversion

Min Instrument Range -35

Max Instrument Range 200

Zero Point Reference

Reference Point Notes

PROC | SENS P

Number of Sensors

How Processed Other-SPDS Calculation by the plant computer.

Sensor Locations Containment

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode Varies depending on Sensor

Temp. Comp. for DP Xmtrs

Level Reference Leg

Unique System Desc. SPDS Calculation by the plant computer. It considers CETs, Loop RTDs, unheated HJTC, and RCS pressure in the calculation.

Date 4/21/92

Reactor Unit HN1

Data Feeder N/A

NRC ERDS Parameter CORE FLOW

Point ID C409

Plant Spec Point Desc. Total RCS Flow Rate

Generic|Cond Desc. Total Reactor Coolant Flow

Analog|Digital A

Engr Units|Dig States KGPM

Engr Units Conversion Complex

Min Instrument Range 0

Max Instrument Range 320

Zero Point Reference

Reference Point Notes

PROC | SENS P

Number of Sensors 4

How Processed Other-Validated sum

Sensor Locations Containment

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode LOW

Temp. Comp. for DP Xmtrs N

Level Reference Leg N/A

Unique System Desc. Total RCS Flow Rate is the validated sum of each of four RCS loop flows, which are calculated from sensor differential pressures.

Date 4/21/92

Reactor Unit HN1

Data Feeder N/A

NRC ERDS Parameter SG LEVEL 1/A

Point ID CSG1LVL

Plant Spec Point Desc. SG1 LEVEL (WR)

Generic|Cond Desc. Steam Generator 1 (or A) Water Level

Analog|Digital A

Engr Units|Dig States %

Engr Units Conversion Approx. 3.2 inches per %

Min Instrument Range 0

Max Instrument Range 100

Zero Point Reference Other

Reference Point Notes Lower Level Instrument Tap; Approx. 18" above tube sheet.

PROC | SENS P

Number of Sensors 2

How Processed Validated Average

Sensor Locations Containment

Alarm|Trip Setpoints 100

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fall. Mode LOW

Temp. Comp. for DP Xmtrs N

Level Reference Leg WET

Unique System Desc. Wide range steam generator level. Top of the tubes is at approx. 70% indicated.

NRC ERDS Parameter SG LEVEL 2/B
Point ID CSG2LVL
Plant Spec Point Desc. SG2 LEVEL (WR)
Generic|Cond Desc. Steam Generator 2 (or B) Water Level
Analog|Digital A
Engr Units|Dig States %
Engr Units Conversion Approx. 3.2 inches per %
Min Instrument Range 0
Max Instrument Range 100
Zero Point Reference Other
Reference Point Notes Lower Level Instrument Tap; Approx. 18" above tube sheet.
PROC | SENS P
Number of Sensors 2
How Processed Validated Average
Sensor Locations Containment
Alarm|Trip Setpoints 100
NI Det. PS Cut Off Pwr Lvl N/A
NI Det. PS Turn On Pwr Lvl N/A
Instrument Fail. Mode LOW
Temp. Comp. for DP Xmtrs N
Level Reference Leg WET
Unique System Desc. Wide range steam generator level. Top of the tubes is at approx. 70% indicated.

Date 4/21/92

Reactor Unit HN1

Data Feeder N/A

NRC ERDS Parameter SG LEVEL 3/C

Point ID CSG3LVL

Plant Spec Point Desc. SG3 LEVEL (WR)

Generic|Cond Desc. Steam Generator 3 (or C) Water Level

Analog|Digital A

Engr Units|Dig States %

Engr Units Conversion Approx. 3.2 inches per %

Min Instrument Range 0

Max Instrument Range 100

Zero Point Reference Other

Reference Point Notes Lower Level Instrument Tap; Approx. 18" above tube sheet.

PROC | SENS P

Number of Sensors 2

How Processed Validated Average

Sensor Locations Containment

Alarm|Trip Setpoints 100

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode LOW

Temp. Comp. for DP Xmtrs N

Level Reference Leg WET

Unique System Desc. Wide range steam generator level. Top of the tubes is at approx. 70% indicated.

Date 4/21/92	Reactor Unit HN1	Data Feeder N/A
NRC ERDS Parameter	SG LEVEL 4/D	
Point ID	CSG4LVL	
Plant Spec Point Desc.	SG4 LEVEL (WR)	
Generic Cond Desc.	Steam Generator 4 (or D) Water Level	
Analog Digital	A	
Engr Units Dig States	%	
Engr Units Conversion	Approx. 3.2 inches per %	
Min Instrument Range	0	
Max Instrument Range	100	
Zero Point Reference	Other	
Reference Point Notes	Lower Level Instrument Tap; Approx. 18" above tube sheet.	
PROC SENS	P	
Number of Sensors	2	
How Processed	Validated Average	
Sensor Locations	Containment	
Alarm Trip Setpoints	100	
NI Det. PS Cut Off Pwr Lvl	N/A	
NI Det. PS Turn On Pwr Lvl	N/A	
Instrument Fail. Mode	LOW	
Temp. Comp. for DP Xmtrs	N	
Level Reference Leg	WET	
Unique System Desc.	Wide range steam generator level. Top of the tubes is at approx. 70% indicated.	

Date 4/21/92

Reactor Unit HN1

Data Feeder N/A

NRC ERDS Parameter SG PRESS 1/A

Point ID CSG1PRESS

Plant Spec Point Desc. SG1 PRESSURE

Generic|Cond Desc. Steam Generator 1 (or A) Pressure

Analog|Digital A

Engr Units|Dig States PSIG

Engr Units Conversion

Min Instrument Range 0

Max Instrument Range 1050

Zero Point Reference

Reference Point Notes

PROC | SENS P

Number of Sensors 1

How Processed Validated input

Sensor Locations Containment

Alarm|Trip Setpoints LO:50; HI:1050

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode LOW

Temp. Comp. for DP Xmtrs N

Level Reference Leg N/A

Unique System Desc. Steam Generator Pressure

Date 4/21/92

Reactor Unit HN1

Data Feeder N/A

NRC ERDS Parameter SG PRESS 2/B

Point ID CSG2PRESS

Plant Spec Point Desc. SG2 PRESSURE

Generic|Cond Desc. Steam Generator 2 (or B) Pressure

Analog|Digital A

Engr Units|Dig States PSIG

Engr Units Conversion

Min Instrument Range 0

Max Instrument Range 1050

Zero Point Reference

Reference Point Notes

PROC | SENS P

Number of Sensors 1

How Processed Validated input

Sensor Locations Containment

Alarm|Trip Setpoints LO:50; HI:1050

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode LOW

Temp. Comp. for DP Xmtrs

Level Reference Leg

Unique System Desc. Steam Generator Pressure

NRC ERDS Parameter SG PRESS 3/C
Point ID CSG3PRESS
Plant Spec Point Desc. SG3 PRESSURE
Generic|Cond Desc. Steam Generator 3 (or C) Pressure
Analog|Digital A
Engr Units|Dig States PSIG
Engr Units Conversion
Min Instrument Range 0
Max Instrument Range 1050
Zero Point Reference
Reference Point Notes
PROC | SENS P
Number of Sensors 1
How Processed Validated Input
Sensor Locations Containment
Alarm|Trip Setpoints LO:50; HI:1050
NI Det. PS Cut Off Pwr Lvl N/A
NI Det. PS Turn On Pwr Lvl N/A
Instrument Fail. Mode LOW
Temp. Comp. for DP Xmtrs
Level Reference Leg
Unique System Desc. Steam Generator Pressure

NRC ERDS Parameter SG PRESS 4/D
Point ID CSG4PRESS
Plant Spec Point Desc. SG4 PRESSURE
Generic|Cond Desc. Steam Generator 4 (or D) Pressure
Analog|Digital A
Engr Units|Dig States PSIG
Engr Units Conversion
Min Instrument Range 0
Max Instrument Range 1050
Zero Point Reference
Reference Point Notes
PROC | SENS P
Number of Sensors 1
How Processed Validated input
Sensor Locations Containment
Alarm|Trip Setpoints LO:50; HI:1050
NI Det. PS Cut Off Pwr Lvl N/A
NI Det. PS Turn On Pwr Lvl N/A
Instrument Fail. Mode LOW
Temp. Comp. for DP Xmtrs
Level Reference Leg
Unique System Desc. Steam Generator Pressure

Date 4/21/92 Factor Unit HN1 Data Feeder N/A
 NRC ERDS Parameter MN FD FL 1/A
 Point ID C159
 Plant Spec Point Desc. SG1 MAIN FW FLOW
 Generic|Cond Desc. Stm Gen 1 (or A) Main Feedwater Flow
 Analog|Digital A
 Engr Units|Dig States MLB/HR
 Engr Units Conversion
 Min Instrument Range 0
 Max Instrument Range 10
 Zero Point Reference
 Reference Point Notes
 PROC | SENS P
 Number of Sensors 3
 How Processed Other-Complex; see description.
 Sensor Locations Turbine Building
 Alarm|Trip Setpoints
 NI Det. PS Cut Off Pwr Lvl N/A
 NI Det. PS Turn On Pwr Lvl N/A
 Instrument Fall. Mode LOW
 Temp. Comp. for DP Xmtrs N
 Level Reference Leg N/A
 Unique System Desc. Calculated SG Flow based on orifice plate differential pressure
 compensated for pressure and temperature density effects.

Date	4/21/92	Reactor Unit	HN1	Data Feeder	N/A
NRC ERDS Parameter	MN FD FL 2/B				
Point ID	C160				
Plant Spec Point Desc.	SG2 MAIN FW FLOW				
Generic Cond Desc.	Strm Gen 2 (or B) Main Feedwater Flow				
Analog Digital	A				
Engr Units Dig States	MLB/HR				
Engr Units Conversion					
Min Instrument Range	0				
Max Instrument Range	10				
Zero Point Reference					
Reference Point Notes					
PROC SENS	P				
Number of Sensors	3				
How Processed	Validated Average				
Sensor Locations	Turbine Building				
Alarm Trip Setpoints					
NI Det. PS Cut Off Pwr Lvl	N/A				
NI Det. PS Turn On Pwr Lvl	N/A				
Instrument Fall. Mode	LOW				
Temp. Comp. for DP Xmtrs	N				
Level Reference Leg	N/A				
Unique System Desc.	Calculated SG Flow based on orifice plate differential pressure compensated for pressure and temperature density effects.				

Date 4/21/92 Reactor Unit HN1

Data Feeder N/A

NRC ERDS Parameter MN FD FL 3/C

Point ID C161

Plant Spec Point Desc. SG3 MAIN FW FLOW

Generic|Cond Desc. Stm Gen 3 (or C) Main Feedwater Flow

Analog|Digital A

Engr Units|Dig States MLB/HR

Engr Units Conversion

Min Instrument Range 0

Max Instrument Range 10

Zero Point Reference

Reference Point Notes

PROC | SENS P

Number of Sensors 3

How Processed Validated Average

Sensor Locations Turbine Building

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode LOW

Temp. Comp. for DP Xmtrs N

Level Reference Leg N/A

Unique System Desc. Calculated SG Flow based on orifice plate differential pressure compensated for pressure and temperature density effects.

NRC ERDS Parameter MN FD FL 4/D

Point ID C162

Plant Spec Point Desc. SG4 MAIN r-w FLOW

Generic|Cond Desc. Stm Gen 4 (or D) Main Feedwater Flow

Analog|Digital A

Engr Units|Dig States MLB/HR

Engr Units Conversion

Min Instrument Range 0

Max Instrument Range 10

Zero Point Reference

Reference Point Notes

PROC | SENS P

Number of Sensors 3

How Processed Validated Average

Sensor Locations Turbine Building

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode LOW

Temp. Comp. for DP Xmtrs N

Level Reference Leg N/A

Unique System Desc. Calculated SG Flow based on orifice plate differential pressure compensated for pressure and temperature density effects.

Date	4/21/92	Reactor Unit	HN1	Data Feeder	N/A
NRC ERDS Parameter	AX FD FL 1/A				
Point ID	CSG1AUXFLO				
Plant Spec Point Desc.	SG1 AUX FW FLOW				
Generic Cond Desc.	Stm Gen 1 (or A) Auxiliary FW Flow				
Analog Digital	A				
Engr Units Dig States	GPM				
Engr Units Conversion					
Min Instrument Range	0				
Max Instrument Range	300				
Zero Point Reference					
Reference Point Notes					
PROC SENS	P				
Number of Sensors	1				
How Processed	Validated Input				
Sensor Locations	Terry Turbine Room				
Alarm Trip Setpoints	300				
NI Det. PS Cut Off Pwr Lvl	N/A				
NI Det. PS Turn On Pwr Lvl	N/A				
Instrument Fall. Mode	LOW				
Temp. Comp. for DP Xmtrs					
Level Reference Leg	N/A				
Unique System Desc.	Steam Generator Auxiliary Feedwater Flow				

Date 4/21/92	Reactor Unit HN1	Data Feeder N/A
NRC ERDS Parameter	AX FD FL 2/B	
Point ID	CSG2AUXFLO	
Plant Spec Point Desc.	SG2 AUX FW FLOW	
Generic Cond Desc.	Stm Gen 2 (or B) Auxiliary FW Flow	
Analog Digital	A	
Engr Units Dig States	GPM	
Engr Units Conversion		
Min Instrument Range	0	
Max Instrument Range	300	
Zero Point Reference		
Reference Point Notes		
PROC SENS	P	
Number of Sensors	1	
How Processed	Validated Input	
Sensor Locations	Terry Turbine Room	
Alarm Trip Setpoints	300	
NI Det. PS Cut Off Pwr Lvl	N/A	
NI Det. PS Turn On Pwr Lvl	N/A	
Instrument Fail. Mode	LOW	
Temp. Comp. for DP Xmtrs		
Level Reference Leg	N/A	
Unique System Desc.	Steam Generator Auxiliary Feedwater Flow	

NRC ERDS Parameter AX FD FL 3/C
Point ID CSG3AUXFLO
Plant Spec Point Desc. SG3 AUX FW FLOW
Generic|Cond Desc. Stm Gen 3 (or C) Auxiliary FW Flow
Analog|Digital A
Engr Units|Dig States GPM
Engr Units Conversion
Min Instrument Range 0
Max Instrument Range 300
Zero Point Reference
Reference Point Notes
PROC | SENS P
Number of Sensors 1
How Processed Validated Input
Sensor Locations Terry Turbine Room
Alarm|Trip Setpoints 300
NI Det. PS Cut Off Pwr Lvl N/A
NI Det. PS Turn On Pwr Lvl N/A
Instrument Fail. Mode LOW
Temp. Comp. for DP Xmtrs
Level Reference Leg N/A
Unique System Desc. Steam Generator Auxiliary Feedwater Flow

NRC ERDS Parameter	AX FD FL 4/D
Point ID	CSG4AUXFLO
Plant Spec Point Desc.	SG4 AUX FW FLOW
Generic Cond Desc.	Stm Gen 4 (or D) Auxiliary FW Flow
Analog Digital	A
Engr Units Dig States	GPM
Engr Units Conversion	
Min Instrument Range	0
Max Instrument Range	300
Zero Point Reference	
Reference Point Notes	
PROC SENS	P
Number of Sensors	1
How Processed	Validated Input
Sensor Locations	Terry Turbine Room
Alarm Trip Setpoints	300
NI Det. PS Cut Off Pwr Lvl	N/A
NI Det. PS Turn On Pwr Lvl	N/A
Instrument Fall. Mode	LOW
Temp. Comp. for DP Xmtrs	
Level Reference Leg	N/A
Unique System Desc.	Steam Generator Auxiliary Feedwater Flow

NRC ERDS Parameter HL TEMP 1/A
Point ID TE-413A
Plant Spec Point Desc. RCS HOT LEG TEMP(WR)
Generic|Cond Desc. Stm Gen 1 (or A) Inlet Temperature
Analog|Digital A
Engr Units|Dig States F
Engr Units Conversion
Min Instrument Range 0
Max Instrument Range 750
Zero Point Reference
Reference Point Notes
PROC | SENS S
Number of Sensors 1
How Processed
Sensor Locations Containment
Alarm|Trip Setpoints LO:0; HI:750
NI Det. PS Cut Off Pwr Lvl N/A
NI Det. PS Turn On Pwr Lvl N/A
Instrument Fall. Mode HIGH
Temp. Comp. for DP Xmtrs N
Level Reference Leg N/A
Unique System Desc. Wide Range RCS HOT LEG TEMP

NRC ERDS Parameter HL TEMP 2/B

Point ID TE-423A

Plant Spec Point Desc. RCS HOT LEG TEMP(WR)

Generic|Cond Desc. Stm Gen 2 (or B) Inlet Temperature

Analog|Digital A

Engr Units|Dig States F

Engr Units Conversion

Min Instrument Range 0

Max Instrument Range 750

Zero Point Reference

Reference Point Notes

PROC | SENS S

Number of Sensors 1

How Processed

Sensor Locations Containment

Alarm|Trip Setpoints LO:0; HI:750

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode HIGH

Temp. Comp. for DP Xmtrs

Level Reference Leg

Unique System Desc. Wide Range RCS HOT LEG TEMP

Date 4/21/92	Reactor Unit HN1	Data Feeder N/A
NRC ERDS Parameter	HL TEMP 3/C	
Point ID	TE-433A	
Plant Spec Point Desc.	RCS HOT LEG TEMP(WR)	
Generic Cond Desc.	Stm Gen 3 (or C) Inlet Temperature	
Analog Digital	A	
Engr Units Dig States	F	
Engr Units Conversion		
Min Instrument Range	0	
Max Instrument Range	750	
Zero Point Reference		
Reference Point Notes		
PROC SENS	S	
Number of Sensors	1	
How Processed		
Sensor Locations	Containment	
Alarm Trip Setpoints	LO:0; HI:750	
NI Det. PS Cut Off Pwr Lvl	N/A	
NI Det. PS Turn On Pwr Lvl	N/A	
Instrument Fail. Mode	HIGH	
Temp. Comp. for DP Xmtrs		
Level Reference Leg		
Unique System Desc.	Wide Range RCS HOT LEG TEMP	

NRC ERDS Parameter HL TEMP 4/D
Point ID TE-443A
Plant Equip. Point Desc. RCS HOT LEG TEMP(WR)
Generic|Cond Desc. Stm Gen 4 (or D) Inlet Temperature
Analog|Digital A
Engr Units|Dig States F
Engr Units Conversion
Min Instrument Range 0
Max Instrument Range 750
Zero Point Reference
Reference Point Notes
PROC | SENS S
Number of Sensors 1
How Processed
Sensor Locations Containment
Alarm|Trip Setpoints LO:0; HI:750
NI Det. PS Cut Off Pwr Lvl N/A
NI Det. PS Turn On Pwr Lvl N/A
Instrument Fail. Mode HIGH
Temp. Comp. for DP Xmtrs
Level Reference Leg
Unique System Desc. Wide Range RCS HOT LEG TEMP

Date 4/21/92 Reactor Unit HN1

Data Feeder N/A

NRC ERDS Parameter CL TEMP I/A

Point ID TE-413B

Plant Spec Point Desc. RCS COLD LEG TEM(WR)

Generic|Cond Desc. Stm Gen 1 (or A) Outlet Temperature

Analog|Digital A

Engr Units|Dig States F

Engr Units Conversion

Min Instrument Range 50

Max Instrument Range 750

Zero Point Reference

Reference Point Notes

PROC | SENS S

Number of Sensors 1

How Processed

Sensor Locations Containment

Alarm|Trip Setpoints LO:50; HI:750

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode HIGH

Temp. Comp. for DP Xmtrs

Level Reference Leg

Unique System Desc. Wide Range RCS COLD LEG TEMP

Date 4/21/92 Reactor Unit HN1 Data Feeder N/A
NRC ERDS Parameter CL TEMP 2/B
Point ID TE-423B
Plant Spec Point Desc. RCS COLD LEG TEM(WR)
Generic|Cond Desc. Stm Gen 2 (or B) Outlet Temperature
Analog|Digital A
Engr Units|Dig States F
Engr Units Conversion
Min Instrument Range 50
Max Instrument Range 750
Zero Point Reference
Reference Point Notes
PROC | SENS S
Number of Sensors 1
How Processed
Sensor Locations Containment
Alarm|Trip Setpoints LO:50; HI:750
NI Det. PS Cut Off Pwr Lvl N/A
NI Det. PS Turn On Pwr Lvl N/A
Instrument Fall. Mode HIGH
Temp. Comp. for DP Xmtrs
Level Reference Leg
Unique System Desc. Wide Range RCS COLD LEG TEMP

Date 4/21/92

Reactor Unit HN1

Data Feeder N/A

NRC ERDS Parameter CL TEMP 3/C

Point ID TE-433B

Plant Spec Point Desc. RCS COLD LEG TEM(WR)

Generic|Cond Desc. Strm Gen 3 (or C) Outlet Temperature

Analog|Digital A

Engr Units|Dig States F

Engr Units Conversion

Min Instrument Range 50

Max Instrument Range 750

Zero Point Reference

Reference Point Notes

PROC | SENS S

Number of Sensors 1

How Processed

Sensor Locations Containment

Alarm|Trip Setpoints LO:50; HI:750

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode HIGH

Temp. Comp. for DP Xmtrs

Level Reference Leg

Unique System Desc. Wide Range RCS COLD LEG TEMP

Date 4/21/92 Reactor Unit HN1 Data Feeder N/A
NRC ERDS Parameter CL TEMP 4/D
Point ID TE-443B
Plant Spec Point Desc. RCS COLD LEG TEM(WR)
Generic|Cond Desc. Stm Gen 4 (or D) Outlet Temperature
Analog|Digital A
Engr Units|Dig States F
Engr Units Conversion
Min Instrument Range 50
Max Instrument Range 750
Zero Point Reference
Reference Point Notes
PROC | SENS S
Number of Sensors 1
How Processed
Sensor Locations Containment
Alarm|Trip Setpoints LO:50; HI:750
NI Det. PS Cut Off Pwr Lvl N/A
NI Det. PS Turn On Pwr Lvl N/A
Instrument Fail. Mode HIGH
Temp. Comp. for DP Xmtrs
Level Reference Leg
Unique System Desc. Wide Range RCS COLD LEG TEMP

Date 4/21/92	Reactor Unit HN1	Data Feeder N/A
NRC ERDS Parameter	RCS PRESSURE	
Point ID	CRCSPRESS	
Plant Spec Point Desc.	RCS PRESSURE (WR)	
Generic Cond Desc.	Reactor Coolant System Pressure	
Analog Digital	A	
Engr Units Dig States	PSIG	
Engr Units Conversion		
Min Instrument Range	0	
Max Instrument Range	3000	
Zero Point Reference		
Reference Point Notes		
PROC SENS	P	
Number of Sensors	5	
How Processed	Complex-see description	
Sensor Locations	Containment	
Alarm Trip Setpoints	3000	
NI Det. PS Cut Off Pwr Lvl	N/A	
NI Det. PS Turn On Pwr Lvl	N/A	
Instrument Fail. Mode	LOW	
Temp. Comp. for DP Xmtrs	N	
Level Reference Leg	N/A	
Unique System Desc.	Wide Range RCS Pressure is the Validated, weighted average of two RCS hot leg pressure inputs, and three pressurizer pressure inputs.	

Date 4/21/92 Reactor Unit HN1

Data Feeder N/A

NRC ERDS Parameter PRZR LEVEL

Point ID CPZRLVL

Plant Spec Point Desc. PRESSURIZER LEVEL

Generic|Cond Desc. Primary System Pressurizer Level

Analog|Digital A

Engr Units|Dig States %

Engr Units Conversion Approx 3.9 inches per %

Min Instrument Range 0

Max Instrument Range 100

Zero Point Reference Other

Reference Point Notes Referenced to lower level instrument tap

PROC | SENS P

Number of Sensors 3

How Processed Validated Average

Sensor Locations Containment

Alarm|Trip Setpoints LO:22; HI:53

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode LOW

Temp. Comp. for DP Xmits N

Level Reference Leg WET

Unique System Desc. Pressurizer Level is calibrated for hot, full power conditions. The top of the pressurizer heaters is at approx. 9.5%.

Date 4/21/92 Reactor Unit HN1

Data Feeder N/A

NRC ERDS Parameter RCS CHG/MU

Point ID FM-110

Plant Spec Point Desc. CHARGING FLOW

Generic|Cond Desc. Primary System Charging or Makeup Flow

Analog|Digital A

Engr Units|Dig States GPM

Engr Units Conversion

Min Instrument Range 0

Max Instrument Range 200

Zero Point Reference

Reference Point Notes

PROC | SENS S

Number of Sensors 1

How Processed

Sensor Locations Primary Auxilliary Building

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode LOW

Temp. Comp. for DP Xmtrs

Level Reference Leg

Unique System Desc.

Date 4/21/92 Reactor Unit HN1

Data Feeder N/A

NRC ERDS Parameter HP SI FLOW

Point ID N/A

Plant Spec Point Desc.

Generic|Cond Desc. High Pressure Safety Injection Flow

Analog|Digital A

Engr Units|Dig States GPM

Engr Units Conversion

Min Instrument Range

Max Instrument Range

Zero Point Reference

Reference Point Notes

PROC | SENS

Number of Sensors

How Processed

Sensor Locations

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode

Temp. Comp. for DP Xmtrs

Level Reference Leg

Unique System Desc.

Date 4/21/92 Reactor Unit HN1

Data Feeder N/A

NRC ERDS Parameter LP SI FLOW

Point ID N/A

Plant Spec Point Desc.

Generic|Cond Desc. Low Pressure Safety Injection Flow

Analog|Digital A

Engr Units|Dig States GPM

Engr Units Conversion

Min Instrument Range

Max Instrument Range

Zero Point Reference

Reference Point Notes

PROC | SENS

Number of Sensors

How Processed

Sensor Locations

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode

Temp. Comp. for DP Xmtrs

Level Reference Leg

Unique System Desc.

Date 4/21/92 Reactor Unit HN1

Data Feeder N/A

NRC ERDS Parameter CTMNT SMP NR

Point ID N/A

Plant Spec Point Desc.

Generic|Cond Desc. Containment Sump Narrow Range Level

Analog|Digital A

Engr Units|Dig States IN

Engr Units Conversion

Min Instrument Range

Max Instrument Range

Zero Point Reference

Reference Point Notes

PROC | SENS

Number of Sensors

How Processed

Sensor Locations

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode

Temp. Comp. for DP Xmtrs

Level Reference Leg

Unique System Desc.

NRC ERDS Parameter CTMNT SMP WR
Point ID CWATERLVL
Plant Spec Point Desc. CTMT WATER LVL (WR)
Generic/Cond Desc. Containment Sump Wide Range Level
Analog/Digital A
Engr Units/Dig States FT
Engr Units Conversion Approx 93200 gallons per ft above 1'6".
Min Instrument Range 1
Max Instrument Range 9
Zero Point Reference CNTFLR
Reference Point Notes Floor at elevation 1'6"
PROC | SENS P
Number of Sensors 2
How Processed Validated Average
Sensor Locations Containment
Alarm/Trip Setpoints LO:1.5; HI:8.5
NI Det. PS Cut Off Pwr Lvl N/A
NI Det. PS Turn On Pwr Lvl N/A
Instrument Fail. Mode LOW
Temp. Comp. for DP Xmtrs N/A
Level Reference Leg N/A
Unique System Desc. Containment Water Level for 1'6" to 8'6" elevation. Corresponds to 0 to ≈650,000 gallons.

NRC ERDS Parameter EFF GAS RAD

Point ID R14B-ALRM

Piant Spec Point Desc. MAIN STACK MONITOR

Generic|Cond Desc. Radioactivity of Released Gasses

Analog|Digital D

Engr Units|Dig States NORMAL/ALARM

Engr Units Conversion

Min Instrument Range

Max Instrument Range

Zero Point Reference

Reference Point Notes

PROC | SENS P

Number of Sensors 3

How Processed Validated Average

Sensor Locations Other-HP Chem Svc Building

Alarm|Trip Setpoints Variable

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode LOW

Temp. Comp. for DP Xmtrs N

Level Reference Leg N/A

Unique System Desc. Readout in $\mu\text{Ci}/\text{sec}$ requires two default assumptions:
 First, an assumed mix, and monitor efficiency to go from cpm to $\mu\text{Ci}/\text{cc}$. Low range is based on Xe-133, mid and high range is based on Kr-85.
 Second, stack flow is assumed at 52,000 cfm for one fan.
 Digital state corresponds to logic value 1/0 respectively.

Date 4/21/92 Reactor Unit HN1

Data Feeder N/A

NRC ERDS Parameter EFF LIQ RAD

Point ID N/A

Plant Spec Point Desc.

Generic|Cond Desc. Radioactivity of Released Liquids

Analog|Digital A

Engr Units|Dig States MCI/HR

Engr Units Conversion

Min Instrument Range

Max Instrument Range

Zero Point Reference

Reference Point Notes

PROC | SENS

Number of Sensors

How Processed

Sensor Locations

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode

Temp. Comp. for DP Xmtrs

Level Reference Leg

Unique System Desc.

Date 4/21/92 Reactor Unit HN1

Data Feeder N/A

NRC ERDS Parameter COND A/E RAD

Point ID N/A

Plant Spec Point Desc.

Generic|Cond Desc. Condenser Air Ejector Radioactivity

Analog|Digital A

Engr Units|Dig States C/MIN

Engr Units Conversion

Min Instrument Range

Max Instrument Range

Zero Point Reference

Reference Point Notes

PROC | SENS

Number of Sensors

How Processed

Sensor Locations

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. S Turn On Pwr Lvl N/A

Instrument Fall. Mode

Temp. Comp. for DP Xmtrs

Level Reference Leg

Unique System Desc.

Date 4/21/92 Reactor Unit HN1

Data Feeder N/A

NRC ERDS Parameter CNTMNT RAD

Point ID CCTRAD

Plant Spec Point Desc. CTMT HI RANGE RAD

Generic|Cond Desc. Radiation Level in the Containment

Analog|Digital A

Engr Units|Dig States R/HR

Engr Units Conversion

Min Instrument Range 1

Max Instrument Range E+8

Zero Point Reference

Reference Point Notes

PROC | SENS P

Number of Sensors 2

How Processed Validated Average

Sensor Locations Containment

Alarm|Trip Setpoints LO:1.0; HI:E+8

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode LOW

Temp. Comp. for DP Xmtrs N

Level Reference Leg N/A

Unique System Desc.

Date 4/21/92 Reactor Unit HN1

Data Feeder N/A

NRC ERDS Parameter RCS LTDN RAD

Point ID N/A

Plant Spec Point Desc.

Generic|Cond Desc. Rad Level of the RCS Letdown Line

Analog|Digital A

Engr Units|Dig States C/SEC

Engr Units Conversion

Min Instrument Range

Max Instrument Range

Zero Point Reference

Reference Point Notes

PROC | SENS

Number of Sensors

How Processed

Sensor Locations

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode

Temp. Comp. for DP Xmtrs

Level Reference Leg

Unique System Desc.

Date 4/21/92 Reactor Unit HN1

Data Feeder N/A

NRC ERDS Parameter MAIN SL 1/A

Point ID N/A

Plant Spec Point Desc.

Generic|Cond Desc. Stm Gen 1 (or A) Steam Line Rad Level

Analog|Digital A

Engr Units|Dig States MR/HR

Engr Units Conversion

Min Instrument Range

Max Instrument Range

Zero Point Reference

Reference Point Notes

PROC | SENS

Number of Sensors

How Processed

Sensor Locations

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode

Temp. Comp. for DP Xmtrs

Level Reference Leg

Unique System Desc.

Date	4/21/92	Reactor Unit	HN1	Data Feeder	N/A
NRC ERDS Parameter	MAIN SL 2/B				
Point ID	N/A				
Plant Spec Point Desc.					
Generic Cond Desc.	Stm Gen 2 (or B) Steam line Rad Level				
Analog Digital	A				
Engr Units Dig States	MR/HR				
Engr Units Conversion					
Min Instrument Range					
Max Instrument Range					
Zero Point Reference					
Reference Point Notes					
PROC SENS					
Number of Sensors					
How Processed					
Sensor Locations					
Alarm Trip Setpoints					
NI Det. PS Cut Off Pwr Lvl	N/A				
NI Det. PS Turn On Pwr Lvl	N/A				
Instrument Fail. Mode					
Temp. Comp. for DP Xmtrs					
Level Reference Leg					
Unique System Desc.					

Date 4/21/92 Reactor Unit HN1

Data Feeder N/A

NRC ERDS Parameter MAIN SL 3/C

Point ID N/A

Plant Spec Point Desc.

Generic|Cond Desc. Stm Gen 3 (or C) Steam Line Rad Level

Analog|Digital A

Engr Units|Dig States MR/HR

Engr Units Conversion

Min Instrument Range

Max Instrument Range

Zero Point Reference

Reference Point Notes

PROC | SENS

Number of Sensors

How Processed

Sensor Locations

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode

Temp. Comp. for DP Xmtrs

Level Reference Leg

Unique System Desc.

Date 4/21/92 Reactor Unit HN1

Data Feeder N/A

NRC ERDS Parameter MAIN SL 4/D

Point ID N/A

Plant Spec Point Desc.

Generic|Cond Desc. Stm Gen 4 (or D) Steam Line Rad Level

Analog|Digital A

Engr Units|Dig States MR/hr

Engr Units Conversion

Min Instrument Range

Max Instrument Range

Zero Point Reference

Reference Point Notes

PROC | SENS

Number of Sensors

How Processed

Sensor Locations

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode

Temp. Comp. for DP Xmtrs

Level Reference Leg

Unique System Desc.

Date 4/21/92	Reactor Unit HN1	Data Feeder N/A
NRC ERDS Parameter	SG BD RAD 1A	
Point ID	N/A	
Plant Spec Point Desc.		
Generic Cond Desc.	Stm Gen 1 (or A) Blowdown Rad Level	
Analog Digital	A	
Engr Units Dig States	MR/HR	
Engr Units Conversion		
Min Instrument Range		
Max Instrument Range		
Zero Point Reference		
Reference Point Notes		
PROC SENS		
Number of Sensors		
How Processed		
Sensor Locations		
Alarm Trip Setpoints		
NI Det. PS Cut Off Pwr Lvl	N/A	
NI Det. PS Turb On Pwr Lvl	N/A	
Instrument Fail. Mode		
Temp. Comp. for DP Xmtrs		
Level Reference Leg		
Unique System Desc.		

Date 4/21/92 Reactor Unit HN1

Data Feeder N/A

NRC ERDS Parameter SG BD RAD 2B

Point ID N/A

Plant Spec Point Desc.

Generic|Cond Desc. Stm Gen 2 (or B) Blowdown Rad Level

Analog|Digital A

Engr Units|Dig States MR/HR

Engr Units Conversion

Min Instrument Range

Max Instrument Range

Zero Point Reference

Reference Point Notes

PROC | SENS

Number of Sensors

How Processed

Sensor Locations

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode

Temp. Comp. for DP Xmtrs

Level Reference Leg

Unique System Desc.

Date 4/21/92 Reactor Unit HN1

Data Feeder N/A

NRC ERDS Parameter SG BD RAD 3C

Point ID N/A

Plant Spec Point Desc.

Generic|Cond Desc. Stm Gen 3 (or C) Blowdown Rad Level

Analog|Digital A

Engr Units|Dig States MR/HR

Engr Units Conversion

Min Instrument Range

Max Instrument Range

Zero Point Reference

Reference Point Notes

PROC | SENS

Number of Sensors

How Processed

Sensor Locations

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode

Temp. Comp. for DP Xmtrs

Level Reference Leg

Unique System Desc.

Date 4/21/92 Reactor Unit HN1

Data Feeder N/A

NRC ERDS Parameter SG BD RAD 4D

Point ID N/A

Plant Spec Point Desc.

Generic|Cond Desc. Stm Gen 4 (or D) Blowdown Rad Level

Analog|Digital A

Engr Units|Dig States MR/HR

Engr Units Conversion

Min Instrument Range

Max Instrument Range

Zero Point Reference

Reference Point Notes

PROC | SENS

Number of Sensors

How Processed

Sensor Locations

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode

Temp. Comp. for DP Xmtrs

Level Reference Leg

Unique System Desc.

NRC ERDS Parameter CTMNT PRESS
Point ID CCTPRESS
Plant Spec Point Desc. CTMT PRESSURE (WR)
Generic|Cond Desc. Containment Pressure
Analog|Digital A
Engr Units|Dig States PSIG
Engr Units Conversion
Min Instrument Range -5
Max Instrument Range 120
Zero Point Reference
Reference Point Notes
PROC | SENS P
Number of Sensors 2
How Processed Validated Average
Sensor Locations Enclosure Building
Alarm|Trip Setpoints LO:-5; HI:120
NI Det. PS Cut Off Pwr Lvl N/A
NI Det. PS Turn On Pwr Lvl N/A
Instrument Fail. Mode LOW
Temp. Comp. for DP Xmtrs N
Level Reference Leg N/A
Unique System Desc.

Date 4/21/92 Reactor Unit HN1

Data Feeder N/A

NRC ERDS Parameter CTMNT TEMP

Point ID TR-1801-1

Plant Spec Point Desc. VAPOR CTMT TEMP

Generic|Cond Desc. Containment Temperature

Analog|Digital A

Engr Units|Dig States F

Engr Units Conversion

Min Instrument Range 30

Max Instrument Range 150

Zero Point Reference

Reference Point Notes

PROC | SENS S

Number of Sensors 1

How Processed

Sensor Locations Containment

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode HIGH

Temp. Comp. for DP Xmtrs N

Level Reference Leg N/A

Unique System Desc.

Date 4/21/92 Reactor Unit HN1 Data Feeder N/A
NRC ERDS Parameter H2 CONC
Point ID N/A
Plant Spec Point Desc.
Generic|Cond Desc. Containment Hydrogen Concentration
Analog|Digital A
Engr Units|Dig States %
Engr Units Conversion
Min Instrument Range
Max Instrument Range
Zero Point Reference
Reference Point Notes
PROC | SENS
Number of Sensors
How Processed
Sensor Locations
Alarm|Trip Setpoints
NI Det. PS Cut Off Pwr Lvl N/A
NI Det. PS Turn On Pwr Lvl N/A
Instrument Fail. Mode
Temp. Comp. for DP Xmtrs
Level Reference Leg
Unique System Desc.

NRC ERDS Parameter	SWST LEVEL
Point ID	LT-118
Plant Spec Point Desc.	BORIC ACID TK LEVEL
Generic Cond Desc.	Borated Water Storage Tank Level
Analog Digital	A
Engr Units Dig States	GAL
Engr Units Conversion	
Min Instrument Range	0
Max Instrument Range	20000
Zero Point Reference	Other
Reference Point Notes	TNKBOT + 10"
PROC SENS	S
Number of Sensors	1
How Processed	
Sensor Locations	Primary Auxiliary Building
Alarm Trip Setpoints	Low 13,000
NI Det. PS Cut Off Pwr Lvl	N/A
NI Det. PS Turn C Pwr Lvl	N/A
Instrument Mode	LOW
Temp. Comp. for L Xmtrs	N
Level Reference Leg	N/A
Unique System Desc.	Boric Acid Tank Level. Tank is inverted semisphere shape.

NRC ERDS Parameter WIND SPEED

Point ID CWS196

Plant Spec Point Desc. WIND SPEED (196 FT)

Generic|Cond Desc. Wind Speed at the Reactor Site

Analog|Digital A

Engr Units|Dig States MPH

Engr Units Conversion

Min Instrument Range 0

Max Instrument Range 100

Zero Point Reference

Reference Point Notes

PROC | SENS P

Number of Sensors 1

How Processed

Sensor Locations Yard

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode LOW

Temp. Comp. for DP Xmtrs N

Level Reference Leg N/A

Unique System Desc. Wind speed at the 196 ft level.

NRC ERDS Parameter	WIND DIR
Point ID	CWD196
Plant Spec Point Desc.	WIND DIR (196 FT)
Generic Cond Desc.	Wind Direction at the Reactor Site
Analog Digital	A
Engr Units Dig States	DEGREES
Eng. Units Conversion	
Min Instrument Range	0
Max Instrument Range	360
Zero Point Reference	North
Reference Point Notes	Referenced to the 'from' direction.
PROC SENS	P
Number of Sensors	1
How Processed	
Sensor Locations	Yard
Alarm Trip Setpoints	
NI Det. PS Cut Off Pwr Lvl	N/A
NI Det. PS Turn On Pwr Lvl	N/A
Instrument Fall. Mode	AS IS
Temp. Comp. for DP Xmtrs	N
Level Reference Leg	N/A
Unique System Desc.	Wind direction at the 196 ft level.

NRC ERDS Parameter STAB CLASS

Point ID CDELTAT196

Plant Spec Point Des DELTA TEMP (196 FT)

Generic|Cond Des Air Stability at the Reactor Site

Analog|Digital A

Engr Units|Dig States DEGF

Engr Units Conversion

Min Instrument Range -10

Max Instrument Range 18

Zero Point Reference

Reference Point Notes

PROC | SENS P

Number of Sensors 2

How Processed Other-

Sensor Locations Yard

Alarm|Trip Setpoints

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode HIGH

Temp. Comp. for DP Xmtrs N

Level Reference Leg N/A

Unique System Desc. Delta Temperature is the difference in temperature between the 196 ft and 33 ft elevations.

Date 4/21/92

Reactor Unit HN1

Data Feeder N/A

NRC ERDS Parameter REAC VES LEV

Point ID CPLNLVL

Plant Spec Point Desc. REACTOR PLENUM LEVEL

Generic|Cond Desc. Reactor Vessel Water Level

Analog|Digital D

Engr Units|Dig States %

Engr Units Conversion See description.

Min Instrument Range 0

Max Instrument Range 100

Zero Point Reference Other

Reference Point Notes Referenced to the top of the fuel alignment plate.

PROC | SENS P

Number of Sensors 6

How Processed Other-

Sensor Locations Containment

Alarm|Trip Setpoints LO:10; HI:101

NI Det. PS Cut Off Pwr Lvl N/A

NI Det. PS Turn On Pwr Lvl N/A

Instrument Fail. Mode Varies

Temp. Comp. for DP Xmtrs N

Level Reference Leg N/A

Unique System Desc. Six Heated Junction Thermocouple sensors provide covered/uncovered indication. Possible displayed values are: 0, 15, 28, 42, 61, 84, 100% , referenced to the Fuel Alignment Plate. 100% is = 113 inches above the Fuel Alignment Plate.