Northeast
Nuclear Energy

Rope Ferry Rd. (Route 156), Waterford, CT 06385

Millstone Nuclear Power Station
Northeast Nuclear Energy Company
P.O. Box 128
Waterford, CT 06385-0128
(860) 447-1791
Fax (860) 444-4277

The Northeast Utilities System

MAR 12 2001

Docket Nos. 50-245
50-336
50-423
B18329

RE: 10 CFR 50 Appendix E (Section VI.3.a)

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

Millstone Nuclear Power Station, Unit Nos. 1, 2 and 3
Notification of Change to Emergency Response Data System

Pursuant to the requirements of 10 CFR 50 Appendix E, Section VI.3.a, "Emergency Response Data System," Northeast Nuclear Energy Company (NNECO) hereby provides notice to the Nuclear Regulatory Commission (NRC) of software changes that affect the transmitted data points identified in the Millstone Nuclear Power Station, Unit No. 2 (MP2) and Unit No. 3 (MP3) Emergency Response Data System (ERDS) Data Point Library. Submittal of this information constitutes compliance with provisions of the subject rule to notify the NRC within 30 days after the data point software changes have been completed. Software changes to the ERDS data points were completed on February 16, 2001. The software changes that affect the transmitted data points associated with MP2 and MP3 are presented in Attachment 1 and Attachment 2 respectively and are summarized below. This submittal does not affect Millstone Nuclear Power Station, Unit No. 1 (MP1) ERDS data points. MP1 has been decommissioned and emergency response data points are no longer transmitted.

Millstone Unit No. 2

- Replaced Data Point RU1 with Data Point R8169.
- Replaced Data Point L3001 with Data Point RWSTLVL.

Millstone Unit No. 3

- Added Data Point CVHVR19A1.

A006

Attachments 3 and 4 present the complete MP2 and MP3 Data Point Library Reference File transmitted to the NRC, including software changes identified in Attachments 1 and 2. With the exception of the information conveyed by Attachments 1 and 2, the information presented in Attachments 3 and 4 does not present software changes that affect transmitted data points associated with MP2 and MP3. All four attachments have been formatted consistent with the requirements in NUREG 1394, "Emergency Response Data System (ERDS) Implementation," Revision 1. Attachments 3 and 4 replace the MP2 and MP3 Data Point Libraries, respectively, which are currently in use by the NRC.

There are no regulatory commitments contained within this letter.

If you should have any questions on the above, please contact Mr. Paul Willoughby at (860) 447-1791, extension 3655.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

Robert G. Lizotte
Master Process Owner - Assessment

Attachments (4)

cc: H. J. Miller, Region I Administrator (2 Copies)
J. B. Hickman, NRC Project Manager, Millstone Unit No. 1
P. C. Cataldo, Resident Inspection, Millstone Unit No. 2
D. S. Collins, NRC Project Manager, Millstone Unit No. 2
S. R. Jones, Senior Resident Inspector, Millstone Unit No. 2
V. Nerses, NRC Senior Project Manager, Millstone Unit No. 3
A. C. Cerne, Senior Resident Inspector, Millstone Unit No. 3

Director
Bureau of Air Management
Monitoring and Radiation Division
Department of Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

Docket Nos. 50-245
50-336
50-423
B18329

Attachment 1

Millstone Nuclear Power Station, Unit Nos. 1, 2 and 3

MP2 Emergency Response Data System Data Point Library
Software Changes That Affect Transmitted Data Points

Date: December 6, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	EFF GAS RAD
Point ID	R8169
Plant Spec Point Desc.	U2 WR EBFS RAD
Generic I Condensed Desc.	Radioactivity of Released Gasses
Analog I Digital	A
Engr Units I Dig States	uC/CC
Engr Units Conversion	$10^{(3.00 * Volts - 10.00)}$ where Volts = 1-5
Min Instrument Range	E-7
Max Instrument Range	E+5
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC I SENS	S
Number of Sensors	1
How Processed	N/A
Sensor Locations	Yard - Base of Stack
Alarm I Trip Setpoints	Alarm = 1 µci/cc
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.	U2 WR EBFS RAD

Normal range conversion factor:	1.4x10-2 µci/cc/ccpm
Mid range conversion factor:	3.3x10-5 µci/cc/ccpm
High range conversion factor:	1.0x10-2 µci/cc/ccpm

Stack flow range can be 0 to 18,000 scfm

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	BWST LEVEL
Point ID	RWSTLVL
Plant Spec Point Desc.	RWST LEVEL
Generic I Condensed Desc.	Borated Water Storage Tank Level
Analog I Digital	A
Engr Units I Dig States	%
Engr Units Conversion	Linear
Min Instrument Range	0
Max Instrument Range	100
Zero Point Reference	Other
Reference Point Notes	Referenced to top of tank outlet pipe
PROC I SENS	P
Number of Sensors	4
How Processed	Validated Average
Sensor Locations	Yard
Alarm I Trip Setpoints	HIGH = 97.0%, Low = 94.0%
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 is the validated average of sensors: L3001, L3002, L3003, L3004 (See Specification SP-EE-201) Refueling Water Storage Tank Level is ≈ 4750 gallons per %

Docket Nos. 50-245
50-336
50-423
B18329

Attachment 2

Millstone Nuclear Power Station, Unit Nos. 1, 2 and 3

MP3 Emergency Response Data System Data Point Library
Software Changes That Affect Transmitted Data Points

Date: December 6, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	EFF GAS RAD
Point ID	CVHVR19A1
Plant Spec Point Desc.	SLCRS CH1
Generic I Condensed Desc.	Radioactivity of Released Gasses
Analog I Digital	A
Engr Units I Dig States	UCCC
Engr Units Conversion	OTHER
Min Instrument Range	0.03
Max Instrument Range	50
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC I SENS	P
Number of Sensors	1
How Processed	DRMS
Sensor Locations	Auxiliary Building
Alarm I Trip Setpoints	Alert = 1 µci/cc
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.	SLCRS CH1 is based on sensor: 3HVR-RE19A (mid-range) Conversion factor is: 1.4xE-5 µCi/CC/ccpm This is based on 1 HR decay from shutdown mix of core noble gas inventory.

Docket Nos. 50-245
50-336
50-423
B18329

Attachment 3

Millstone Nuclear Power Station, Unit Nos. 1, 2 and 3

MP2 Emergency Response Data System Data Point Library

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	NI POWER RNG
Point ID	RXPWR
Plant Spec Point Desc.	REACTOR POWER -R
Generic | Condensed Desc.	Nuclear Instruments, Power Range
Analog | Digital	A
Engr Units | Dig States	%
Engr Units Conversion	Other
Min Instrument Range	E-8
Max Instrument Range	100
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	N/A
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 are monitored and validated to provide indicated reactor power

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	NI INTER RNG
Point ID	N/A
Plant Spec Point Desc.	N/A
Generic | Condensed Desc.	Nuclear Instruments, Intermediate Range
Analog | Digital	A
Engr Units | Dig States	N/A
Engr Units Conversion	N/A
Min Instrument Range	N/A
Max Instrument Range	N/A
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	N/A
Number of Sensors	N/A
How Processed	N/A
Sensor Locations	N/A
Alarm | Trip Setpoints	N/A
NI Det. PS Cut Off Pwr Lvl	N/A
NI Det. PS Turn On Pwr Lvl	N/A
Instrument Fail. Mode	N/A
Temp Comp. for DP Xmtrs	N/A
Level Reference Leg	N/A
Unique System Desc.	N/A

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	NI SOURC RNG
Point ID	N/A
Plant Spec Point Desc.	N/A
Generic | Condensed Desc.	Nuclear Instruments, Source Range
Analog | Digital	A
Engr Units | Dig States	N/A
Engr Units Conversion	N/A
Min Instrument Range	N/A
Max Instrument Range	N/A
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	N/A
Number of Sensors	N/A
How Processed	N/A
Sensor Locations	N/A
Alarm | Trip Setpoints	N/A
NI Det. PS Cut Off Pwr Lvl	N/A
NI Det. PS Turn On Pwr Lvl	N/A
Instrument Fail. Mode	N/A
Temp Comp. for DP Xmtrs	N/A
Level Reference Leg	N/A
Unique System Desc.	N/A

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	REAC VES LEV
Point ID	RXLVL-A
Plant Spec Point Desc.	REACTOR VSL LVL 1-8
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	N/A
NI Det. PS Cut Off Pwr Lvl	N/A
NI Det. PS Turn On Pwr Lvl	N/A
Instrument Fail. 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 (HJTEM1-A thru HJTEM8-A).

```
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: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	REAC VES LEV
Point ID	RXLVL-B
Plant Spec Point Desc.	REACTOR VSL LVL 1-8
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	N/A
NI Det. PS Cut Off Pwr Lvl	N/A
NI Det. PS Turn On Pwr Lvl	N/A
Instrument Fail. 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 (HJTEM1-B thru HJTEM8-B).

```
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: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	TEMP CORE EX
Point ID	INTAMX
Plant Spec Point Desc.	MAX REGION AVG TEMP -H
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	N/A
NI Det. PS Cut Off Pwr Lvl	N/A
NI Det. PS Turn On Pwr Lvl	N/A
Instrument Fail. Mode	N/A
Temp Comp. for DP Xmtrs	N
Level Reference Leg	N/A
Unique System Desc.	Maximum Region Average Temperature is the validated highest value of 11 CET regions. Each region is an average of between 3-5 temperature sensors. (See Specification SP-EE-201)

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	SUB MARGIN
Point ID	CETHSUB
Plant Spec Point Desc.	MIN REG-AVG SUBCOOLING
Generic | Condensed Desc.	Saturation Temperature – Highest CET
Analog | Digital	A
Engr Units | Dig States	DEG F
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	50
How Processed	Highest
Sensor Locations	Containment
Alarm | Trip Setpoints	N/A
NI Det. PS Cut Off Pwr Lvl	N/A
NI Det. PS Turn On Pwr Lvl	N/A
Instrument Fail. Mode	N/A
Temp Comp. for DP Xmtrs	N
Level Reference Leg	N/A
Unique System Desc.	MIN RCS SUBCOOLING is calculated by: TSAT (based upon PZRPR) - INTAMX

Date: June 21, 2000 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	Other
Min Instrument Range	0
Max Instrument Range	150
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	12
How Processed	Sum of Validated Average
Sensor Locations	Containment
Alarm | Trip Setpoints	N/A
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. Total RCS Flow is only valid for when sensors are within the following ranges: 1500 < P100X, P100Y < 2500 PSIA and 515 < T111A, T121A < 665 DEGF

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	SG LEVEL 1/A
Point ID	SG1LVL
Plant Spec Point Desc.	STEAM GENERATOR 1 LVL -H
Generic | Condensed Desc.	Steam Generator 1 (or A) Water Level
Analog | Digital	A
Engr Units | Dig States	%
Engr Units Conversion	Linear
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	LOW = 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 is calibrated for hot full power conditions. Top of the U-tubes is at ≈ 7.4% indicated level. Approximately 1.8 inches per % Steam Generator level is the validated average of sensors: L1113A, L1113B, L1113C, L1113D (See Specification SP-EE-201)

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	SG LEVEL 2/B
Point ID	SG2LVL
Plant Spec Point Desc.	STEAM GENERATOR 2 LVL -H
Generic | Condensed Desc.	Steam Generator 2 (or B) Water Level
Analog | Digital	A
Engr Units | Dig States	%
Engr Units Conversion	Linear
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	LOW = 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. Approximately 1.8 inches per % Steam Generator level is the validated average of sensors: L1123A, L1123B, L1123C, L1123D (See Specification SP-EE-201)

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

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

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

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

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	SG PRESS 1/A
Point ID	SG1PR
Plant Spec Point Desc.	STEAM GENERATOR 1 PR -H
Generic | Condensed Desc.	Steam Generator 1 (or A) Pressure
Analog | Digital	A
Engr Units | Dig States	PSIA
Engr Units Conversion	Linear
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	LOW = 520.0 PSIA
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 is the validated average of sensors: P1013A, P1013B, P1013C, P1013D (See Specification SP-EE-201)

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	SG PRESS 2/B
Point ID	SG2PR
Plant Spec Point Desc.	STEAM GENERATOR 2 PR -H
Generic | Condensed Desc.	Steam Generator 2 (or B) Pressure
Analog | Digital	A
Engr Units | Dig States	PSIA
Engr Units Conversion	Linear
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	LOW = 520.0 PSIA
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 is the validated average of sensors: P1023A, P1023B, P1023C, P1023D (See Specification SP-EE-201)

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

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

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

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

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	MN FD FL 1/A
Point ID	F5268
Plant Spec Point Desc.	SG1 FW FLO
Generic | Condensed Desc.	Stm Gen 1 (or A) Main Feedwater Flow
Analog | Digital	A
Engr Units | Dig States	KLB/HR
Engr Units Conversion	Linear
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	N/A
Sensor Locations	Turbine Building
Alarm | Trip Setpoints	N/A
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: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	MN FD FL 2/B
Point ID	F5269
Plant Spec Point Desc.	SG2 FW FLO
Generic | Condensed Desc.	Stm Gen 2 (or B) Main Feedwater Flow
Analog | Digital	A
Engr Units | Dig States	KLB/HR
Engr Units Conversion	Linear
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	N/A
Sensor Locations	Turbine Building
Alarm | Trip Setpoints	N/A
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: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	MN FD FL 3/C
Point ID	N/A
Plant Spec Point Desc.	N/A
Generic | Condensed Desc.	Stm Gen 3 (or C) Main Feedwater Flow
Analog | Digital	A
Engr Units | Dig States	N/A
Engr Units Conversion	N/A
Min Instrument Range	N/A
Max Instrument Range	N/A
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	N/A
Number of Sensors	N/A
How Processed	N/A
Sensor Locations	N/A
Alarm | Trip Setpoints	N/A
NI Det. PS Cut Off Pwr Lvl	N/A
NI Det. PS Turn On Pwr Lvl	N/A
Instrument Fail. Mode	N/A
Temp Comp. for DP Xmtrs	N/A
Level Reference Leg	N/A
Unique System Desc.	N/A

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

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

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	AX FD FL 1/A
Point ID	F5277
Plant Spec Point Desc.	SG1 AUX FW FLO
Generic | Condensed Desc.	Stm Gen 1 (or A) Auxiliary FW Flow
Analog | Digital	A
Engr Units | Dig States	GPM
Engr Units Conversion	Linear
Min Instrument Range	0
Max Instrument Range	600
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	S
Number of Sensors	1
How Processed	N/A
Sensor Locations	Turbine Building
Alarm | Trip Setpoints	N/A
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: June 21, 2000 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 FLO
Generic | Condensed Desc.	Stm Gen 2 (or B) Auxiliary FW Flow
Analog | Digital	A
Engr Units | Dig States	GPM
Engr Units Conversion	Linear
Min Instrument Range	0
Max Instrument Range	600
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	S
Number of Sensors	1
How Processed	N/A
Sensor Locations	Turbine Building
Alarm | Trip Setpoints	N/A
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: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

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

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

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

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	HL TEMP 1/A
Point ID	TW111X
Plant Spec Point Desc.	WIDE RANGE TH (LOOP 1)
Generic | Condensed Desc.	Stm Gen 1 (or A) Inlet Temperature
Analog | Digital	A
Engr Units | Dig States	DEG F
Engr Units Conversion	Linear
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	N/A
Sensor Locations	Containment
Alarm | Trip Setpoints	N/A
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: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	HL TEMP 2/B
Point ID	TW121X
Plant Spec Point Desc.	WIDE RANGE TH (LOOP 2)
Generic | Condensed Desc.	Stm Gen 2 (or B) Inlet Temperature
Analog | Digital	A
Engr Units | Dig States	DEG F
Engr Units Conversion	Linear
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	N/A
Sensor Locations	Containment
Alarm | Trip Setpoints	N/A
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: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

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

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

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

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	CL TEMP 1/A
Point ID	T115
Plant Spec Point Desc.	LOOP 1 COLD LEG WIDE RANGE TEMP
Generic | Condensed Desc.	Stm Gen 1 (or A) Outlet Temperature
Analog | Digital	A
Engr Units | Dig States	DEG F
Engr Units Conversion	Linear
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	N/A
Sensor Locations	Containment
Alarm | Trip Setpoints	N/A
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: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	CL TEMP 2/B
Point ID	T125
Plant Spec Point Desc.	LOOP 2 COLD LEG WIDE RANGE TEMP
Generic | Condensed Desc.	Stm Gen 2 (or B) Outlet Temperature
Analog | Digital	A
Engr Units | Dig States	DEG F
Engr Units Conversion	Linear
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	N/A
Sensor Locations	Containment
Alarm | Trip Setpoints	N/A
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: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

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

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

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

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	RCS PRESSURE
Point ID	PZRPR
Plant Spec Point Desc.	PRESSURIZER PRESSURE -P
Generic | Condensed Desc.	Reactor Coolant System Pressure
Analog | Digital	A
Engr Units | Dig States	PSIA
Engr Units Conversion	Linear
Min Instrument Range	See Description
Max Instrument Range	See Description
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	5
How Processed	See Description
Sensor Locations	Containment
Alarm | Trip Setpoints	HIGH = 2350.0 PSIA, LOW = 2100.0 PSIA
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
Unique System Desc.	Pressurizer Pressure calculation varies depending upon whether it is in the low, normal, or wide range. During the low range, Pressurizer Pressure is the validated weighted average pressure from two low range (0-1600 PSIA) sensors: P103, P103-1 and one wide range (0-3000 PSIA) sensor: P102B1. During the normal range, Pressurizer Pressure is the validated weighted average pressure from two normal range (1500-2500 PSIA) sensors: P100X, P100Y and one wide range (0-3000 PSIA) sensor: P102B1. During the wide range, Pressurizer Pressure is the wide range (0-3000 PSIA) sensor: P102B1. (See Specification SP-EE-201)

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	PRZR LEVEL
Point ID	PZRLVL
Plant Spec Point Desc.	PRESSURIZER LEVEL -I
Generic | Condensed Desc.	Primary System Pressurizer Level
Analog | Digital	A
Engr Units | Dig States	%
Engr Units Conversion	Other
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	LOLO = 20.0%
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% indicated level Pressurizer Level is the validated average of pressure & temperature compensated sensors: L110X, L110Y, L103. Pressurizer Level is ≈ 3.6 inches per %

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	RCS CHG/MU
Point ID	F212
Plant Spec Point Desc.	CHARG FLO
Generic | Condensed Desc.	Primary System Charging of Makeup Flow
Analog | Digital	A
Engr Units | Dig States	GPM
Engr Units Conversion	Linear
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	N/A
Sensor Locations	Auxiliary Building
Alarm | Trip Setpoints	LOW = 25.0 GPM
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: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	HP SI FLOW
Point ID	TOTHPSI
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	300 √((Volts - 1)/4) where Volts = 1-5
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	Validated Sum
Sensor Locations	Auxiliary Building
Alarm | Trip Setpoints	N/A
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 sum of sensors: F311, F321, F331, F341 (See Specification SP-EE-201)

Date: June 21, 2000 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	2000 $\sqrt{}$((Volts - 1)/4) where Volts = 1-5
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
How Processed	Validated Sum
Sensor Locations	Auxiliary Building
Alarm | Trip Setpoints	N/A
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.	Low Pressure Safety Injection Flow is the validated sum of sensors: F312, F322, F332, F342 (See Specification SP-EE-201)

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	CTMNT SMP NR
Point ID	L9155
Plant Spec Point Desc.	CTM NORM SUMP LVL
Generic | Condensed Desc.	Containment Sump Narrow Range Level
Analog | Digital	A
Engr Units | Dig States	%
Engr Units Conversion	Linear
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	N/A
Sensor Locations	Containment
Alarm | Trip Setpoints	HIGH = 78.0%, LOW = 6.7%
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: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	CTMNT SMP WR
Point ID	N/A
Plant Spec Point Desc.	N/A
Generic | Condensed Desc.	Containment Sump Wide Range Level
Analog | Digital	A
Engr Units | Dig States	N/A
Engr Units Conversion	N/A
Min Instrument Range	N/A
Max Instrument Range	N/A
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	N/A
Number of Sensors	N/A
How Processed	N/A
Sensor Locations	N/A
Alarm | Trip Setpoints	N/A
NI Det. PS Cut Off Pwr Lvl	N/A
NI Det. PS Turn On Pwr Lvl	N/A
Instrument Fail. Mode	N/A
Temp Comp. for DP Xmtrs	N/A
Level Reference Leg	N/A
Unique System Desc.	N/A

Date: December 6, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	EFF GAS RAD
Point ID	R8169
Plant Spec Point Desc.	U2 WR EBFS RAD
Generic | Condensed Desc.	Radioactivity of Released Gasses
Analog | Digital	A
Engr Units | Dig States	uC/CC
Engr Units Conversion	$10^{(3.00 * Volts - 10.00)}$ where Volts = 1-5
Min Instrument Range	E-7
Max Instrument Range	E+5
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	S
Number of Sensors	1
How Processed	N/A
Sensor Locations	Yard - Base of Stack
Alarm | Trip Setpoints	Alarm = 1 µci/cc
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.	U2 WR EBFS RAD.

Normal range conversion factor:	1.4x10-2 µci/cc/ccpm
Mid range conversion factor:	3.3x10-5 µci/cc/ccpm
High range conversion factor:	1.0x10-2 µci/cc/ccpm

Stack flow range can be 0 to 18,000 scfm

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	EFF LIQ RAD
Point ID	R9049
Plant Spec Point Desc.	CLEAN WASTE DISCHARGE
Generic | Condensed Desc.	Radioactivity of Released Liquids
Analog | Digital	A
Engr Units | Dig States	KCPM
Engr Units Conversion	$10^{(1.25 * Volts - 3.25)}$ where Volts = 1-5
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	N/A
Sensor Locations	Auxiliary 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 upon high alarm. Reading would remain high despite isolation. Monitor is off-scale high before any release of significant dose. Conversion to meaningful µci/sec depends largely on background (varies), flow rate, and nuclide mix.

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	EFF LIQ RAD
Point ID	R9116
Plant Spec Point Desc.	AERATED WASTE DISCHARGE
Generic | Condensed Desc.	Radioactivity of Released Liquids
Analog | Digital	A
Engr Units | Dig States	KCPM
Engr Units Conversion	$10^{(1.25 * Volts - 3.25)}$ where Volts = 1-5
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	N/A
Sensor Locations	Auxiliary 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 upon high alarm. Reading would remain high despite isolation. Monitor is off-scale high before any release of significant dose. Conversion to meaningful µci/sec depends largely on background (varies), flow rate, and nuclide mix.

Date: December 6, 2000 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	$10^{(1.25 * Volts - 0.25)}$ where Volts = 1-5
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	N/A
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 µci/cc depends on nuclide mix, monitor background, and detector efficiency. Typical factor is 3.8 x10-8 µci/cc/ccpm Discharge is to stack. All release estimates should use stack monitor (RM-8169)

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	CNTMNT RAD
Point ID	R8240
Plant Spec Point Desc.	CTMT AREA RAD MONITOR
Generic | Condensed Desc.	Radiation Level in the Containment
Analog | Digital	A
Engr Units | Dig States	R/HR
Engr Units Conversion	$10^{(2.00 * Volts - 2.00)}$ where Volts = 1-5
Min Instrument Range	E+0
Max Instrument Range	E+8
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	S
Number of Sensors	1
How Processed	N/A
Sensor Locations	Containment
Alarm | Trip Setpoints	HIGH = 50.0 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: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	RCS LTDN RAD
Point ID	CVR202A
Plant Spec Point Desc.	LETDOWN GROSS ACTIVITY
Generic | Condensed Desc.	Rad Level of the RCS Letdown Line
Analog | Digital	A
Engr Units | Dig States	KCPM
Engr Units Conversion	$10^{(1.25 * [R202A - 1.00] - 2.00)}$ where R202A = 1-5 Volts
Min Instrument Range	E-2
Max Instrument Range	E+3
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	1
How Processed	N/A
Sensor Locations	Auxiliary Building
Alarm | Trip Setpoints	HIGH = 10^3 KCPM
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 Gross Activity is based on sensor: R202A. 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.

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	MAIN SL 1/A
Point ID	R4299A
Plant Spec Point Desc.	MAIN STM RAD MON A
Generic | Condensed Desc.	Stm Gen 1 (or A) Steam Line Rad Level
Analog | Digital	A
Engr Units | Dig States	R/HR
Engr Units Conversion	$10^{(1.50 * Volts - 3.50)}$ where Volts = 1-5
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	N/A
Sensor Locations	Enclosure Building
Alarm | Trip Setpoints	Alarm = 0.03 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.

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	MAIN SL 2/B
Point ID	R4299C
Plant Spec Point Desc.	MAIN STM RAD MON C
Generic | Condensed Desc.	Stm Gen 2 (or B) Steam Line Rad Level
Analog | Digital	A
Engr Units | Dig States	R/HR
Engr Units Conversion	$10^{(1.50 * Volts - 3.50)}$ where Volts = 1-5
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	N/A
Sensor Locations	Enclosure Building
Alarm | Trip Setpoints	Alarm = 0.03 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.

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

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

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

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

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	SG BD RAD 1A
Point ID	R4262
Plant Spec Point Desc.	S/G BLDN GROSS ACTIVITY
Generic | Condensed Desc.	Stm Gen 1 (or A) Blowdown Rad Level
Analog | Digital	A
Engr Units | Dig States	CPM
Engr Units Conversion	$10^{(1.25 * Volts - 0.25)}$ where Volts = 1-5
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	N/A
Sensor Locations	Auxiliary 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.	Combined blowdown from both steam generators. Conversion factor for Cs-137 is ≈ 5x10-9 µci/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.

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	SG BD RAD 2B
Point ID	R4262
Plant Spec Point Desc.	S/G BLDN GROSS ACTIVITY
Generic | Condensed Desc.	Stm Gen 2 (or B) Blowdown Rad Level
Analog | Digital	A
Engr Units | Dig States	CPM
Engr Units Conversion	$10^{(1.25 * Volts - 0.25)}$ where Volts = 1-5
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	N/A
Sensor Locations	Auxiliary 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.	Combined blowdown from both steam generators. Conversion factor for Cs-137 is ≈ 5x10-9 µci/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.

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	SG BD RAD 3C
Point ID	N/A
Plant Spec Point Desc.	N/A
Generic | Condensed Desc.	Stm Gen 3 (or C) Blowdown Rad Level
Analog | Digital	A
Engr Units | Dig States	N/A
Engr Units Conversion	N/A
Min Instrument Range	N/A
Max Instrument Range	N/A
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	N/A
Number of Sensors	N/A
How Processed	N/A
Sensor Locations	N/A
Alarm | Trip Setpoints	N/A
NI Det. PS Cut Off Pwr Lvl	N/A
NI Det. PS Turn On Pwr Lvl	N/A
Instrument Fail. Mode	N/A
Temp Comp. for DP Xmtrs	N/A
Level Reference Leg	N/A
Unique System Desc.	N/A

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

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

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	CTMNT PRESS
Point ID	CTMTPR
Plant Spec Point Desc.	CONTAINMENT PRESSURE -C
Generic | Condensed Desc.	Containment Pressure
Analog | Digital	A
Engr Units | Dig States	PSIG
Engr Units Conversion	Linear
Min Instrument Range	See Description
Max Instrument Range	See Description
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	5
How Processed	See Description
Sensor Locations	Auxiliary Building
Alarm | Trip Setpoints	N/A
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 Pressure switches between the NR and WR indications when appropriate. Narrow Range Containment Pressure is the validated average of sensors: P8113,P8114, P8115, P8116 (0-60 PSIG). Wide Range Containment Pressure is the sensor: P8238 (0 - 250 PSIA) converted to PSIG. (See Specification SP-EE-201)

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	CTMNT TEMP
Point ID	CTMTT
Plant Spec Point Desc.	CTMT AIR TEMPERATURE -C
Generic | Condensed Desc.	Containment Temperature
Analog | Digital	A
Engr Units | Dig States	DEG F
Engr Units Conversion	Linear
Min Instrument Range	0
Max Instrument Range	350
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	N/A
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 is the validated average of sensors: T8108,T8109 (See Specification SP-EE-201)

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	H2 CONC
Point ID	CTMTH2
Plant Spec Point Desc.	CONTAINMENT H2 CONC -C
Generic | Condensed Desc.	Containment Hydrogen Concentration
Analog | Digital	A
Engr Units | Dig States	%
Engr Units Conversion	Linear
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	N/A
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 Hydrogen Concentration is the validated average of sensors: AE8152, AE8154 (See Specification SP-EE-201)

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	BWST LEVEL
Point ID	RWSTLVL
Plant Spec Point Desc.	RWST LEVEL
Generic | Condensed Desc.	Borated Water Storage Tank Level
Analog | Digital	A
Engr Units | Dig States	%
Engr Units Conversion	Linear
Min Instrument Range	0
Max Instrument Range	100
Zero Point Reference	Other
Reference Point Notes	Referenced to top of tank outlet pipe
PROC | SENS	P
Number of Sensors	4
How Processed	Validated Average
Sensor Locations	Yard
Alarm | Trip Setpoints	HIGH = 97.0%, Low = 94.0%
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 is the validated average of sensors: L3001, L3002, L3003, L3004 (See Specification SP-EE-201) Refueling Water Storage Tank Level is ≈ 4750 gallons per %

Date: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	WIND SPEED
Point ID	WS142
Plant Spec Point Desc.	WIND SPEED 142
Generic | Condensed Desc.	Wind Speed at the Reactor Site
Analog | Digital	A
Engr Units | Dig States	MPH
Engr Units Conversion	Linear
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	N/A
Sensor Locations	Yard
Alarm | Trip Setpoints	N/A
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: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	WIND DIR
Point ID	WD142
Plant Spec Point Desc.	WIND DIRECTION 142
Generic | Condensed Desc.	Wind Direction at the Reactor Site
Analog | Digital	A
Engr Units | Dig States	DEG
Engr Units Conversion	N/A
Min Instrument Range	0
Max Instrument Range	540
Zero Point Reference	North
Reference Point Notes	Measured in the 'from' direction
PROC | SENS	S
Number of Sensors	1
How Processed	N/A
Sensor Locations	Yard
Alarm | Trip Setpoints	N/A
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: June 21, 2000 Reactor Unit: MS2 Data Feeder: N/A

NRC ERDS Parameter	STAB CLASS
Point ID	DT142
Plant Spec Point Desc.	DIFFERENTIAL TEMP 142
Generic | Condensed Desc.	Air Stability at the Reactor Site
Analog | Digital	A
Engr Units | Dig States	DEG F
Engr Units Conversion	Linear
Min Instrument Range	-10
Max Instrument Range	18
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	S
Number of Sensors	1
How Processed	N/A
Sensor Locations	Yard
Alarm | Trip Setpoints	N/A
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

Docket Nos. 50-245
50-336
50-423
B18329

Attachment 4

Millstone Nuclear Power Station, Unit Nos. 1, 2 and 3

MP3 Emergency Response Data System Data Point Library

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	NI POWER RNG
Point ID	CVMXPWRGE
Plant Spec Point Desc.	POWER
Generic | Condensed Desc.	Nuclear Instruments, Power Range
Analog | Digital	A
Engr Units | Dig States	%
Engr Units Conversion	N/A
Min Instrument Range	0
Max Instrument Range	120
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	4
How Processed	Validated Average
Sensor Locations	EXCORE
Alarm | Trip Setpoints	High = 109%
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.	Reactor Power is a validated average of sensors: NMP-NM41F, NMP-NM42F, NMP-NM43F, NMP-NM44F

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	NI INTER RNG
Point ID	NMI-NM35B
Plant Spec Point Desc.	IR DET 1 LOG PWR
Generic | Condensed Desc.	Nuclear Instruments, Intermediate Range
Analog | Digital	A
Engr Units | Dig States	AMPS
Engr Units Conversion	$10^{(1.60 * Volts - 11.00)}$ where Volts = 0-5
Min Instrument Range	E-11
Max Instrument Range	E-3
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	S
Number of Sensors	1
How Processed	N/A
Sensor Locations	EXCORE
Alarm | Trip Setpoints	N/A
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.	Intermediate Range Nuclear Instrument

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	NI SOURC RNG
Point ID	NMS-NM31F
Plant Spec Point Desc.	SOURCE RGE CH 1 LOG PWR
Generic | Condensed Desc.	Nuclear Instruments, Source Range
Analog | Digital	A
Engr Units | Dig States	CPS
Engr Units Conversion	$10^{(1.20 * Volts - 0.00)}$ where Volts = 0-5
Min Instrument Range	E+0
Max Instrument Range	E+6
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	S
Number of Sensors	1
How Processed	N/A
Sensor Locations	EXCORE
Alarm | Trip Setpoints	N/A
NI Det. PS Cut Off Pwr Lvl	When P6 Clears
NI Det. PS Turn On Pwr Lvl	1E-10 AMPS IR
Instrument Fail. Mode	LOW
Temp Comp. for DP Xmtrs	N
Level Reference Leg	N/A
Unique System Desc.	Source Range Nuclear Instrument

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	REAC VES LEV
Point ID	CVUPLENLVL
Plant Spec Point Desc.	UPPER PLENUM 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	TFP
Reference Point Notes	Zero level is Core Alignment Plate
PROC | SENS	P
Number of Sensors	12
How Processed	Validated Average of 2 HJTC Probe Channels
Sensor Locations	INCORE
Alarm | Trip Setpoints	N/A
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.	Reactor vessel level provided by two Heated Junction Thermocouple Probe Channels. Not a continuous readout device. Indication is sensed at the levels of the HJTC pairs. Level above the zero ref is:

```
Percent:  100,   82, 64,   47,   32,   19
Inches:  78.2, 61.5, 47, 32.5, 21.7, 10.9
```

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	TEMP CORE EX
Point ID	CVCETMX
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	Other
Min Instrument Range	200
Max Instrument Range	2300
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	50
How Processed	Validate Highest
Sensor Locations	N/A
Alarm | Trip Setpoints	N/A
NI Det. PS Cut Off Pwr Lvl	N/A
NI Det. PS Turn On Pwr Lvl	N/A
Instrument Fail. Mode	Failure depends on type of fault
Temp Comp. for DP Xmtrs	N
Level Reference Leg	N/A
Unique System Desc.	Maximum Region Average Temperature is the validated highest value of 12 CET regions. Each region is an average of between 3-5 temperature sensors. CET's are monitored by ICCM system

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	SUB MARGIN
Point ID	CVSUBCOOL
Plant Spec Point Desc.	SUBCOOLING
Generic | Condensed Desc.	Saturation Temperature – Highest CET
Analog | Digital	A
Engr Units | Dig States	DEG F
Engr Units Conversion	Other
Min Instrument Range	-35
Max Instrument Range	200
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	56
How Processed	See Description
Sensor Locations	Various
Alarm | Trip Setpoints	N/A
NI Det. PS Cut Off Pwr Lvl	N/A
NI Det. PS Turn On Pwr Lvl	N/A
Instrument Fail. Mode	Depends on which input fails
Temp Comp. for DP Xmtrs	N
Level Reference Leg	N/A
Unique System Desc.	Subcooling is calculated by: TSAT (based upon CVRCSPRES) - CVCETMX

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	CORE FLOW
Point ID	CVRCLF1
Plant Spec Point Desc.	RCS LOOP 1 FLOW
Generic | Condensed Desc.	Total Reactor Coolant Flow
Analog | Digital	A
Engr Units | Dig States	%
Engr Units Conversion	120 √(Volts/10) where Volts = 0-10
Min Instrument Range	0
Max Instrument Range	120
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	3
How Processed	Validated Average
Sensor Locations	Containment
Alarm | Trip Setpoints	Low = 93%
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.	RCS Loop 1 Flow is the validated average of sensors: RCS-F414, RCS-F415, RCS-F416

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	CORE FLOW
Point ID	CVRCLF2
Plant Spec Point Desc.	RCS LOOP 2 FLOW
Generic | Condensed Desc.	Total Reactor Coolant Flow
Analog | Digital	A
Engr Units | Dig States	%
Engr Units Conversion	120 √(Volts/10) where Volts = 0-10
Min Instrument Range	0
Max Instrument Range	120
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	3
How Processed	Validated Average
Sensor Locations	Containment
Alarm | Trip Setpoints	Low = 93%
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.	RCS Loop 2 Flow is the validated average of sensors: RCS-F424, RCS-F425, RCS-F426

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	CORE FLOW
Point ID	CVRCLF3
Plant Spec Point Desc.	RCS LOOP 3 FLOW
Generic | Condensed Desc.	Total Reactor Coolant Flow
Analog | Digital	A
Engr Units | Dig States	%
Engr Units Conversion	120 û(Volts/10) where Volts = 0-10
Min Instrument Range	0
Max Instrument Range	120
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	3
How Processed	Validated Average
Sensor Locations	Containment
Alarm | Trip Setpoints	Low = 93%
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.	RCS Loop 3 Flow is the validated average of sensors: RCS-F434, RCS-F435, RCS-F436

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	CORE FLOW
Point ID	CVRCLF4
Plant Spec Point Desc.	RCS LOOP 4 FLOW
Generic | Condensed Desc.	Total Reactor Coolant Flow
Analog | Digital	A
Engr Units | Dig States	%
Engr Units Conversion	120 √(Volts/10) where Volts = 0-10
Min Instrument Range	0
Max Instrument Range	120
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	3
How Processed	Validated Average
Sensor Locations	Containment
Alarm | Trip Setpoints	Low = 93%
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.	RCS Loop 4 Flow is the validated average of sensors: RCS-F444, RCS-F445, RCS-F446

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	SG LEVEL 1/A
Point ID	FWS-L501
Plant Spec Point Desc.	SG 1 WIDE RANGE I
Generic | Condensed Desc.	Steam Generator 1 (or A) Water Level
Analog | Digital	A
Engr Units | Dig States	%
Engr Units Conversion	Linear
Min Instrument Range	0
Max Instrument Range	100
Zero Point Reference	TUBSHT
Reference Point Notes	Zero is 22" above TUBSHT
PROC | SENS	S
Number of Sensors	1
How Processed	N/A
Sensor Locations	Containment
Alarm | Trip Setpoints	N/A
NI Det. PS Cut Off Pwr Lvl	N/A
NI Det. PS Turn On Pwr Lvl	N/A
Instrument Fail. Mode	Various - Depends on status of ref leg
Temp Comp. for DP Xmtrs	N
Level Reference Leg	WET
Unique System Desc.	Wide Range Steam Generator Level top of the U-tubes is 63% 0 - 100% = 0 - 559"

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	SG LEVEL 2/B
Point ID	FWS-L502
Plant Spec Point Desc.	SG 2 WIDE RANGE II
Generic | Condensed Desc.	Steam Generator 2 (or B) Water Level
Analog | Digital	A
Engr Units | Dig States	%
Engr Units Conversion	Linear
Min Instrument Range	0
Max Instrument Range	100
Zero Point Reference	TUBSHT
Reference Point Notes	Zero is 22" above TUBSHT
PROC | SENS	S
Number of Sensors	1
How Processed	N/A
Sensor Locations	Containment
Alarm | Trip Setpoints	N/A
NI Det. PS Cut Off Pwr Lvl	N/A
NI Det. PS Turn On Pwr Lvl	N/A
Instrument Fail. Mode	Various - Depends on status of ref leg
Temp Comp. for DP Xmtrs	N
Level Reference Leg	WET
Unique System Desc.	Wide Range Steam Generator Level top of the U-tubes is 63% 0 - 100% = 0 - 559"

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	SG LEVEL 3/C
Point ID	FWS-L503
Plant Spec Point Desc.	SG 3 WIDE RANGE III
Generic | Condensed Desc.	Steam Generator 3 (or C) Water Level
Analog | Digital	A
Engr Units | Dig States	%
Engr Units Conversion	Linear
Min Instrument Range	0
Max Instrument Range	100
Zero Point Reference	TUBSHT
Reference Point Notes	Zero is 22" above TUBSHT
PROC | SENS	S
Number of Sensors	1
How Processed	N/A
Sensor Locations	Containment
Alarm | Trip Setpoints	N/A
NI Det. PS Cut Off Pwr Lvl	N/A
NI Det. PS Turn On Pwr Lvl	N/A
Instrument Fail. Mode	Various - Depends on status of ref leg
Temp Comp. for DP Xmtrs	N
Level Reference Leg	WET
Unique System Desc.	Wide Range Steam Generator Level top of the U-tubes is 63% 0 - 100% = 0 - 559"

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	SG LEVEL 4/D
Point ID	FWS-L504
Plant Spec Point Desc.	SG 4 WIDE RANGE IV
Generic | Condensed Desc.	Steam Generator 4 (or D) Water Level
Analog | Digital	A
Engr Units | Dig States	%
Engr Units Conversion	Linear
Min Instrument Range	0
Max Instrument Range	100
Zero Point Reference	TUBSHT
Reference Point Notes	Zero is 22" above TUBSHT
PROC | SENS	S
Number of Sensors	1
How Processed	N/A
Sensor Locations	Containment
Alarm | Trip Setpoints	N/A
NI Det. PS Cut Off Pwr Lvl	N/A
NI Det. PS Turn On Pwr Lvl	N/A
Instrument Fail. Mode	Various - Depends on status of ref leg
Temp Comp. for DP Xmtrs	N
Level Reference Leg	WET
Unique System Desc.	Wide Range Steam Generator Level top of the U-tubes is 63% 0 - 100% = 0 - 559"

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	SG PRESS 1/A
Point ID	CVSGPRES1
Plant Spec Point Desc.	SG1 PRESSURE
Generic | Condensed Desc.	Steam Generator 1 (or A) Pressure
Analog | Digital	A
Engr Units | Dig States	PSIG
Engr Units Conversion	Linear
Min Instrument Range	0
Max Instrument Range	1300
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	3
How Processed	Validated Average
Sensor Locations	Main Steam Valve Building
Alarm | Trip Setpoints	Low = 658.6 PSIG
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 1 Pressure is the validated average of sensors: MSS-P514, MSS-P515, MSS-P516.

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	SG PRESS 2/B
Point ID	CVSGPRES2
Plant Spec Point Desc.	SG2 PRESSURE
Generic | Condensed Desc.	Steam Generator 2 (or B) Pressure
Analog | Digital	A
Engr Units | Dig States	PSIG
Engr Units Conversion	Linear
Min Instrument Range	0
Max Instrument Range	1300
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	3
How Processed	Validated Average
Sensor Locations	Main Steam Valve Building
Alarm | Trip Setpoints	Low = 658.6 PSIG
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 2 Pressure is the validated average of sensors: MSS-P524, MSS-P525, MSS-P526.

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	SG PRESS 3/C
Point ID	CVSGPRES3
Plant Spec Point Desc.	SG3 PRESSURE
Generic | Condensed Desc.	Steam Generator 3 (or C) Pressure
Analog | Digital	A
Engr Units | Dig States	PSIG
Engr Units Conversion	Linear
Min Instrument Range	0
Max Instrument Range	1300
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	3
How Processed	Validated Average
Sensor Locations	Main Steam Valve Building
Alarm | Trip Setpoints	Low = 658.6 PSIG
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 3 Pressure is the validated average of sensors: MSS-P534, MSS-P535, MSS-P536.

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	SG PRESS 4/D
Point ID	CVSGPRES4
Plant Spec Point Desc.	SG4 PRESSURE
Generic | Condensed Desc.	Steam Generator 4 (or D) Pressure
Analog | Digital	A
Engr Units | Dig States	PSIG
Engr Units Conversion	Linear
Min Instrument Range	0
Max Instrument Range	1300
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	3
How Processed	Validated Average
Sensor Locations	Main Steam Valve Building
Alarm | Trip Setpoints	Low = 658.6 PSIG
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 4 Pressure is the validated average of sensors: MSS-P544, MSS-P545, MSS-P546.

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	MN FD FL 1/A
Point ID	CVFWFLOW1
Plant Spec Point Desc.	SG1 MAIN FEEDWATER FLOW
Generic | Condensed Desc.	Stm Gen 1 (or A) Main Feedwater Flow
Analog | Digital	A
Engr Units | Dig States	KPPH
Engr Units Conversion	5000 √(Volts/10) where Volts = 0-10
Min Instrument Range	0
Max Instrument Range	5000
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	2
How Processed	Validated Average
Sensor Locations	Turbine Building
Alarm | Trip Setpoints	N/A
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.	SG1 Main Feedwater Flow is the validated average of sensors: FWS-F510, FWS-F511

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	MN FD FL 2/B
Point ID	CVFWFLOW2
Plant Spec Point Desc.	SG2 MAIN FEEDWATER FLOW
Generic | Condensed Desc.	Stm Gen 2 (or B) Main Feedwater Flow
Analog | Digital	A
Engr Units | Dig States	KPPH
Engr Units Conversion	5000 √(Volts/10) where Volts = 0-10
Min Instrument Range	0
Max Instrument Range	5000
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	2
How Processed	Validated Average
Sensor Locations	Turbine Building
Alarm | Trip Setpoints	N/A
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.	SG2 Main Feedwater Flow is the validated average of sensors: FWS-F520, FWS-F521

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	MN FD FL 3/C
Point ID	CVFWFLOW3
Plant Spec Point Desc.	SG3 MAIN FEEDWATER FLOW
Generic | Condensed Desc.	Stm Gen 3 (or C) Main Feedwater Flow
Analog | Digital	A
Engr Units | Dig States	KPPH
Engr Units Conversion	5000 √(Volts/10) where Volts = 0-10
Min Instrument Range	0
Max Instrument Range	5000
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	2
How Processed	Validated Average
Sensor Locations	Turbine Building
Alarm | Trip Setpoints	N/A
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.	SG3 Main Feedwater Flow is the validated average of sensors: FWS-F530, FWS-F531

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	MN FD FL 4/D
Point ID	CVFWFLOW4
Plant Spec Point Desc.	SG4 MAIN FEEDWATER FLOW
Generic | Condensed Desc.	Stm Gen 4 (or D) Main Feedwater Flow
Analog | Digital	A
Engr Units | Dig States	KPPH
Engr Units Conversion	5000 √(Volts/10) where Volts = 0-10
Min Instrument Range	0
Max Instrument Range	5000
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	2
How Processed	Validated Average
Sensor Locations	Turbine Building
Alarm | Trip Setpoints	N/A
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.	SG4 Main Feedwater Flow is the validated average of sensors: FWS-F540, FWS-F541

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	AX FD FL 1/A
Point ID	CVAUXFW1
Plant Spec Point Desc.	SG1 AUX FD WTR FLOW
Generic | Condensed Desc.	Stm Gen 1 (or A) Auxiliary FW Flow
Analog | Digital	A
Engr Units | Dig States	GPM
Engr Units Conversion	350 √(Volts/10) where Volts = 0-10
Min Instrument Range	0
Max Instrument Range	350
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	1
How Processed	None
Sensor Locations	Containment
Alarm | Trip Setpoints	N/A
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.	SG1 Auxiliary Feedwater Flow is based on sensor: FWA-51A3

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	AX FD FL 2/B
Point ID	CVAUXFW2
Plant Spec Point Desc.	SG2 AUX FD WTR FLOW
Generic | Condensed Desc.	Stm Gen 2 (or B) Auxiliary FW Flow
Analog | Digital	A
Engr Units | Dig States	GPM
Engr Units Conversion	350 √(Volts/10) where Volts = 0-10
Min Instrument Range	0
Max Instrument Range	350
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	1
How Processed	None
Sensor Locations	Containment
Alarm | Trip Setpoints	N/A
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.	SG2 Auxiliary Feedwater Flow is based on sensor: FWA-33B3

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	AX FD FL 3/C
Point ID	CVAUXFW3
Plant Spec Point Desc.	SG3 AUX FD WTR FLOW
Generic | Condensed Desc.	Stm Gen 3 (or C) Auxiliary FW Flow
Analog | Digital	A
Engr Units | Dig States	GPM
Engr Units Conversion	350 √(Volts/10) where Volts = 0-10
Min Instrument Range	0
Max Instrument Range	350
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	1
How Processed	None
Sensor Locations	Containment
Alarm | Trip Setpoints	N/A
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.	SG3 Auxiliary Feedwater Flow is based on sensor: FWA-33C3

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	AX FD FL 4/D
Point ID	CVAUXFW4
Plant Spec Point Desc.	SG4 AUX FD WTR FLOW
Generic | Condensed Desc.	Stm Gen 4 (or D) Auxiliary FW Flow
Analog | Digital	A
Engr Units | Dig States	GPM
Engr Units Conversion	350 √(Volts/10) where Volts = 0-10
Min Instrument Range	0
Max Instrument Range	350
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	1
How Processed	None
Sensor Locations	Containment
Alarm | Trip Setpoints	N/A
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.	SG1 Auxiliary Feedwater Flow is based on sensor: FWA-51D3

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	HL TEMP 1/A
Point ID	RCS-T413A
Plant Spec Point Desc.	RCL 1 WR HOT LEG TEMP
Generic | Condensed Desc.	Stm Gen 1 (or A) Inlet Temperature
Analog | Digital	A
Engr Units | Dig States	DEG F
Engr Units Conversion	Linear
Min Instrument Range	0
Max Instrument Range	700
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	S
Number of Sensors	1
How Processed	N/A
Sensor Locations	Containment
Alarm | Trip Setpoints	Low = 275 DEG F
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: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	HL TEMP 2/B
Point ID	RCS-T423A
Plant Spec Point Desc.	RCL 2 WR HOT LEG TEMP
Generic | Condensed Desc.	Stm Gen 2 (or B) Inlet Temperature
Analog | Digital	A
Engr Units | Dig States	DEG F
Engr Units Conversion	Linear
Min Instrument Range	0
Max Instrument Range	700
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	S
Number of Sensors	1
How Processed	N/A
Sensor Locations	Containment
Alarm | Trip Setpoints	Low = 275 DEG F
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: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	HL TEMP 3/C
Point ID	RCS-T433A
Plant Spec Point Desc.	RCL 3 WR HOT LEG TEMP
Generic | Condensed Desc.	Stm Gen 3 (or C) Inlet Temperature
Analog | Digital	A
Engr Units | Dig States	DEG F
Engr Units Conversion	Linear
Min Instrument Range	0
Max Instrument Range	700
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	S
Number of Sensors	1
How Processed	N/A
Sensor Locations	Containment
Alarm | Trip Setpoints	Low = 275 DEG F
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: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	HL TEMP 4/D
Point ID	RCS-T443A
Plant Spec Point Desc.	RCL 4 WR HOT LEG TEMP
Generic | Condensed Desc.	Stm Gen 4 (or D) Inlet Temperature
Analog | Digital	A
Engr Units | Dig States	DEG F
Engr Units Conversion	Linear
Min Instrument Range	0
Max Instrument Range	700
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	S
Number of Sensors	1
How Processed	N/A
Sensor Locations	Containment
Alarm | Trip Setpoints	Low = 275 DEG F
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: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	CL TEMP 1/A
Point ID	RCS-T413B
Plant Spec Point Desc.	RCL 1 WR COLD LEG TEMP
Generic | Condensed Desc.	Stm Gen 1 (or A) Outlet Temperature
Analog | Digital	A
Engr Units | Dig States	DEG F
Engr Units Conversion	Linear
Min Instrument Range	0
Max Instrument Range	700
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	S
Number of Sensors	1
How Processed	N/A
Sensor Locations	Containment
Alarm | Trip Setpoints	Low = 275 DEG F
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: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	CL TEMP 2/B
Point ID	RCS-T423B
Plant Spec Point Desc.	RCL 2 WR COLD LEG TEMP
Generic | Condensed Desc.	Stm Gen 2 (or B) Outlet Temperature
Analog | Digital	A
Engr Units | Dig States	DEG F
Engr Units Conversion	Linear
Min Instrument Range	0
Max Instrument Range	700
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	S
Number of Sensors	1
How Processed	N/A
Sensor Locations	Containment
Alarm | Trip Setpoints	Low = 275 DEG F
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: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	CL TEMP 3/C
Point ID	RCS-T433B
Plant Spec Point Desc.	RCL 3 WR COLD LEG TEMP
Generic | Condensed Desc.	Stm Gen 3 (or C) Outlet Temperature
Analog | Digital	A
Engr Units | Dig States	DEG F
Engr Units Conversion	Linear
Min Instrument Range	0
Max Instrument Range	700
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	S
Number of Sensors	1
How Processed	N/A
Sensor Locations	Containment
Alarm | Trip Setpoints	Low = 275 DEG F
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: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	CL TEMP 4/D
Point ID	RCS-T443B
Plant Spec Point Desc.	RCL 4 WR COLD LEG TEMP
Generic | Condensed Desc.	Stm Gen 4 (or D) Outlet Temperature
Analog | Digital	A
Engr Units | Dig States	DEG F
Engr Units Conversion	Linear
Min Instrument Range	0
Max Instrument Range	700
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	S
Number of Sensors	1
How Processed	N/A
Sensor Locations	Containment
Alarm | Trip Setpoints	Low = 275 DEG F
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: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	RCS PRESSURE
Point ID	CVRCSPRES
Plant Spec Point Desc.	RCS PRESSURE
Generic | Condensed Desc.	Reactor Coolant System Pressure
Analog | Digital	A
Engr Units | Dig States	PSIA
Engr Units Conversion	Linear
Min Instrument Range	0
Max Instrument Range	3000
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	6
How Processed	Validated Average
Sensor Locations	Containment
Alarm | Trip Setpoints	Low = 1900 PSIA, High = 2385 PSIA
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.	RCS Pressure is the validated average of sensors: (WR) -> RCS-P403, RCS-P405, (NR) -> RCS-P455A*, RCS-P456, RCS-P457, RCS-P458 WR instrument range: 0 - 3000 NR instrument range: 1700 - 2500

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	PRZR LEVEL
Point ID	CVPZRLVL
Plant Spec Point Desc.	PRESSURIZER LEVEL
Generic | Condensed Desc.	Primary System Pressurizer Level
Analog | Digital	A
Engr Units | Dig States	%
Engr Units Conversion	Linear
Min Instrument Range	0
Max Instrument Range	100
Zero Point Reference	COMPLX
Reference Point Notes	Zero point is 62 inches from the bottom
PROC | SENS	P
Number of Sensors	3
How Processed	Validated Average
Sensor Locations	Containment
Alarm | Trip Setpoints	High = 70%
NI Det. PS Cut Off Pwr Lvl	N/A
NI Det. PS Turn On Pwr Lvl	N/A
Instrument Fail. Mode	Various due to condition of ref leg
Temp Comp. for DP Xmtrs	N
Level Reference Leg	WET
Unique System Desc.	Pressurizer level is the validated average of sensors: RCS-L459, RCS-L460, RCS-L461 Pressurizer Water Level top of the heaters is at 7% 0 - 100% = 0 - 520"

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	RCS CHG/MU
Point ID	CHS-F121
Plant Spec Point Desc.	CHARGING FLOW
Generic | Condensed Desc.	Primary System Charging of Makeup Flow
Analog | Digital	A
Engr Units | Dig States	GPM
Engr Units Conversion	200 √(Volts/10) where Volts = 0-10
Min Instrument Range	0
Max Instrument Range	200
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	S
Number of Sensors	1
How Processed	N/A
Sensor Locations	Auxiliary Building
Alarm | Trip Setpoints	High = 150 GPM, Low = 25 GPM
NI Det. PS Cut Off Pwr Lvl	N/A
NI Det. PS Turn On Pwr Lvl	N/A
Instrument Fail. Mode	N/A
Temp Comp. for DP Xmtrs	N
Level Reference Leg	N/A
Unique System Desc.	Charging Flow

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	HP SI FLOW
Point ID	N/A
Plant Spec Point Desc.	N/A
Generic | Condensed Desc.	High Pressure Safety Injection Flow
Analog | Digital	A
Engr Units | Dig States	N/A
Engr Units Conversion	N/A
Min Instrument Range	N/A
Max Instrument Range	N/A
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	N/A
Number of Sensors	N/A
How Processed	N/A
Sensor Locations	N/A
Alarm | Trip Setpoints	N/A
NI Det. PS Cut Off Pwr Lvl	N/A
NI Det. PS Turn On Pwr Lvl	N/A
Instrument Fail. Mode	N/A
Temp Comp. for DP Xmtrs	N/A
Level Reference Leg	N/A
Unique System Desc.	N/A

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	LP SI FLOW
Point ID	N/A
Plant Spec Point Desc.	N/A
Generic | Condensed Desc.	Low Pressure Safety Injection Flow
Analog | Digital	A
Engr Units | Dig States	N/A
Engr Units Conversion	N/A
Min Instrument Range	N/A
Max Instrument Range	N/A
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	N/A
Number of Sensors	N/A
How Processed	N/A
Sensor Locations	N/A
Alarm | Trip Setpoints	N/A
NI Det. PS Cut Off Pwr Lvl	N/A
NI Det. PS Turn On Pwr Lvl	N/A
Instrument Fail. Mode	N/A
Temp Comp. for DP Xmtrs	N/A
Level Reference Leg	N/A
Unique System Desc.	N/A

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	CTMNT SMP NR
Point ID	N/A
Plant Spec Point Desc.	N/A
Generic | Condensed Desc.	Containment Sump Narrow Range Level
Analog | Digital	A
Engr Units | Dig States	N/A
Engr Units Conversion	N/A
Min Instrument Range	N/A
Max Instrument Range	N/A
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	N/A
Number of Sensors	N/A
How Processed	N/A
Sensor Locations	N/A
Alarm | Trip Setpoints	N/A
NI Det. PS Cut Off Pwr Lvl	N/A
NI Det. PS Turn On Pwr Lvl	N/A
Instrument Fail. Mode	N/A
Temp Comp. for DP Xmtrs	N/A
Level Reference Leg	N/A
Unique System Desc.	N/A

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	CTMNT SMP WR
Point ID	CVCTSMPLVL
Plant Spec Point Desc.	CONTAINMENT SUMP LEVEL
Generic | Condensed Desc.	Containment Sump Wide Range Level
Analog | Digital	A
Engr Units | Dig States	FT
Engr Units Conversion	Linear
Min Instrument Range	1
Max Instrument Range	17
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	N/A
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 Sump Level is the validated average if sensors: RSS-L22A1, RSS-L22B1

Date: December 6, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	EFF GAS RAD
Point ID	CVHVR19A1
Plant Spec Point Desc.	SLCRS CH1
Generic | Condensed Desc.	Radioactivity of Released Gasses
Analog | Digital	A
Engr Units | Dig States	UCCC
Engr Units Conversion	OTHER
Min Instrument Range	0.03
Max Instrument Range	50
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	1
How Processed	DRMS
Sensor Locations	Auxiliary Building
Alarm | Trip Setpoints	Alert = 1 µci/cc
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.	SLCRS CH1 is based on sensor: 3HVR-RE19A (mid-range) Conversion factor is: 1.4xE-5 µCi/CC/ccpm This is based on 1 HR decay from shutdown mix of core noble gas inventory.

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	EFF LIQ RAD
Point ID	N/A
Plant Spec Point Desc.	N/A
Generic | Condensed Desc.	Radioactivity of Released Liquids
Analog | Digital	A
Engr Units | Dig States	N/A
Engr Units Conversion	N/A
Min Instrument Range	N/A
Max Instrument Range	N/A
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	N/A
Number of Sensors	N/A
How Processed	N/A
Sensor Locations	N/A
Alarm | Trip Setpoints	N/A
NI Det. PS Cut Off Pwr Lvl	N/A
NI Det. PS Turn On Pwr Lvl	N/A
Instrument Fail. Mode	N/A
Temp Comp. for DP Xmtrs	N/A
Level Reference Leg	N/A
Unique System Desc.	N/A

Date: December 6, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	COND A/E RAD
Point ID	CVARC21
Plant Spec Point Desc.	COND AIR EJECTOR MTR
Generic | Condensed Desc.	Condenser Air Ejector Radioactivity
Analog | Digital	A
Engr Units | Dig States	uCCC
Engr Units Conversion	Other
Min Instrument Range	E-6
Max Instrument Range	E+0
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	1
How Processed	DRMS
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.	Condenser Air ejector Radiation Monitor is based upon sensor: 3ARC-RE21 Conversion factor is: 4.17 E-7 µci/cc/net ccpm This is based on assumed mix as specified in Calculation: RERM-01711-53 This monitor does not serve as a final effluent monitor as air ejector discharge is directed to the stack. Therefore, the stack monitor (3HVR-RE19A) is the final effluent monitor.

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	CNTMNT RAD
Point ID	RMS-R04A
Plant Spec Point Desc.	CTMT H/R ACCIDENT RADMON
Generic | Condensed Desc.	Radiation Level in the Containment
Analog | Digital	A
Engr Units | Dig States	R/HR
Engr Units Conversion	$10^{(0.80 * Volts - 0.00)}$ where Volts = 0-10
Min Instrument Range	E+0
Max Instrument Range	E+8
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	S
Number of Sensors	1
How Processed	N/A
Sensor Locations	Containment
Alarm | Trip Setpoints	Alert = 5 R/HR, Alarm = 500 R/HR
NI Det. PS Cut Off Pwr Lvl	N/A
NI Det. PS Turn On Pwr Lvl	N/A
Instrument Fail. Mode	N/A
Temp Comp. for DP Xmtrs	N
Level Reference Leg	N/A
Unique System Desc.	General Containment Radiation Monitor

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	RCS LTDN RAD
Point ID	N/A
Plant Spec Point Desc.	N/A
Generic | Condensed Desc.	Rad Level of the RCS Letdown Line
Analog | Digital	A
Engr Units | Dig States	N/A
Engr Units Conversion	N/A
Min Instrument Range	N/A
Max Instrument Range	N/A
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	N/A
Number of Sensors	N/A
How Processed	N/A
Sensor Locations	N/A
Alarm | Trip Setpoints	N/A
NI Det. PS Cut Off Pwr Lvl	N/A
NI Det. PS Turn On Pwr Lvl	N/A
Instrument Fail. Mode	N/A
Temp Comp. for DP Xmtrs	N/A
Level Reference Leg	N/A
Unique System Desc.	N/A

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	MAIN SL 1/A
Point ID	CVMSS75
Plant Spec Point Desc.	MN STM RELEASE LINE A
Generic | Condensed Desc.	Stm Gen 1 (or A) Steam Line Rad Level
Analog | Digital	A
Engr Units | Dig States	uCCC
Engr Units Conversion	Other
Min Instrument Range	E-3
Max Instrument Range	E+3
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	1
How Processed	DRMS
Sensor Locations	Main Steam Valve Building
Alarm | Trip Setpoints	Alert = 0.08 µCi/CC, Alarm = 0.8 µCi/CC
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 Line Radiation Monitor is based on sensor: 3MSS-RE75 Conversion factor is: 0.037 µCi/CC/mR/HR based on 1 HR mix. Conversion to release rate depends on nuclide mix and flow.

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	MAIN SL 2/B
Point ID	CVMSS76
Plant Spec Point Desc.	MN STM RELEASE LINE B
Generic | Condensed Desc.	Stm Gen 2 (or B) Steam Line Rad Level
Analog | Digital	A
Engr Units | Dig States	uCCC
Engr Units Conversion	Other
Min Instrument Range	E-3
Max Instrument Range	E+3
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	1
How Processed	DRMS
Sensor Locations	Main Steam Valve Building
Alarm | Trip Setpoints	Alert = 0.08 µCi/CC, Alarm = 0.8 µCi/CC
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 Line Radiation Monitor is based on sensor: 3MSS-RE76 Conversion factor is: 0.037 µCi/CC/mR/HR based on 1 HR mix. Conversion to release rate depends on nuclide mix and flow.

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	MAIN SL 3/C
Point ID	CVMSS77
Plant Spec Point Desc.	MN STM RELEASE LINE C
Generic | Condensed Desc.	Stm Gen 3 (or C) Steam Line Rad Level
Analog | Digital	A
Engr Units | Dig States	uCCC
Engr Units Conversion	Other
Min Instrument Range	E-3
Max Instrument Range	E+3
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	1
How Processed	DRMS
Sensor Locations	Main Steam Valve Building
Alarm | Trip Setpoints	Alert = 0.08 µCi/CC, Alarm = 0.8 µCi/CC
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 Line Radiation Monitor is based on sensor: 3MSS-RE77 Conversion factor is: 0.037 µCi/CC/mR/HR based on 1 HR mix. Conversion to release rate depends on nuclide mix and flow.

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	MAIN SL 4/D
Point ID	CVMSS78
Plant Spec Point Desc.	MN STM RELEASE LINE D
Generic | Condensed Desc.	Stm Gen 4 (or D) Steam Line Rad Level
Analog | Digital	A
Engr Units | Dig States	uCCC
Engr Units Conversion	Other
Min Instrument Range	E-3
Max Instrument Range	E+3
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	1
How Processed	DRMS
Sensor Locations	Main Steam Valve Building
Alarm | Trip Setpoints	Alert = 0.08 µCi/CC, Alarm = 0.8 µCi/CC
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 Line Radiation Monitor is based on sensor: 3MSS-RE78 Conversion factor is: 0.037 µCi/CC/mR/HR based on 1 HR mix. Conversion to release rate depends on nuclide mix and flow.

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	SG BD RAD 1A
Point ID	CVSSR08
Plant Spec Point Desc.	SG BLOWDOWN
Generic | Condensed Desc.	Stm Gen 1 (or A) Blowdown Rad Level
Analog | Digital	A
Engr Units | Dig States	uCCC
Engr Units Conversion	Other
Min Instrument Range	E-6
Max Instrument Range	E-1
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	1
How Processed	DRMS
Sensor Locations	Auxiliary 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.	SG Blowdown is based on radiation monitor: 3SSR-RE08 Blowdown Radiation Monitor combines sample from all four steam generators. Air Ejector Monitor is much more sensitive to tube failures and hence blowdown should be isolated before significant release is detected. Upon a high rad alarm, the monitor will automatically isolate the liquid blowdown from each steam generator.

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	SG BD RAD 2B
Point ID	CVSSR08
Plant Spec Point Desc.	SG BLOWDOWN
Generic | Condensed Desc.	Stm Gen 2 (or B) Blowdown Rad Level
Analog | Digital	A
Engr Units | Dig States	uCCC
Engr Units Conversion	Other
Min Instrument Range	E-6
Max Instrument Range	E-1
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	1
How Processed	DRMS
Sensor Locations	Auxiliary 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.	SG Blowdown is based on radiation monitor: 3SSR-RE08 Blowdown Radiation Monitor combines sample from all four steam generators. Air Ejector Monitor is much more sensitive to tube failures and hence blowdown should be isolated before significant release is detected. Upon a high rad alarm, the monitor will automatically isolate the liquid blowdown from each steam generator.

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	SG BD RAD 3C
Point ID	CVSSR08
Plant Spec Point Desc.	SG BLOWDOWN
Generic | Condensed Desc.	Stm Gen 3 (or C) Blowdown Rad Level
Analog | Digital	A
Engr Units | Dig States	uCCC
Engr Units Conversion	Other
Min Instrument Range	E-6
Max Instrument Range	E-1
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	1
How Processed	DRMS
Sensor Locations	Auxiliary 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.	SG Blowdown is based on radiation monitor: 3SSR-RE08 Blowdown Radiation Monitor combines sample from all four steam generators. Air Ejector Monitor is much more sensitive to tube failures and hence blowdown should be isolated before significant release is detected. Upon a high rad alarm, the monitor will automatically isolate the liquid blowdown from each steam generator.

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	SG BD RAD 4D
Point ID	CVSSR08
Plant Spec Point Desc.	SG BLOWDOWN
Generic | Condensed Desc.	Stm Gen 4 (or D) Blowdown Rad Level
Analog | Digital	A
Engr Units | Dig States	uCCC
Engr Units Conversion	Other
Min Instrument Range	E-6
Max Instrument Range	E-1
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	1
How Processed	DRMS
Sensor Locations	Auxiliary 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.	SG Blowdown is based on radiation monitor: 3SSR-RE08 Blowdown Radiation Monitor combines sample from all four steam generators. Air Ejector Monitor is much more sensitive to tube failures and hence blowdown should be isolated before significant release is detected. Upon a high rad alarm, the monitor will automatically isolate the liquid blowdown from each steam generator.

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	CTMNT PRESS
Point ID	LMS-P24A
Plant Spec Point Desc.	CTMT PRESS WIDE RANGE
Generic | Condensed Desc.	Containment Pressure
Analog | Digital	A
Engr Units | Dig States	PSIA
Engr Units Conversion	Linear
Min Instrument Range	0
Max Instrument Range	200
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	S
Number of Sensors	1
How Processed	N/A
Sensor Locations	Auxiliary Building
Alarm | Trip Setpoints	N/A
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.	Absolute Containment Pressure

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	CTMNT TEMP
Point ID	CVCTMAX
Plant Spec Point Desc.	MAXIMUM CONTAINMENT TEMP
Generic | Condensed Desc.	Containment Temperature
Analog | Digital	A
Engr Units | Dig States	DEG F
Engr Units Conversion	Linear
Min Instrument Range	0
Max Instrument Range	200
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	23
How Processed	Validated Highest
Sensor Locations	Containment
Alarm | Trip Setpoints	N/A
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.	Maximum Containment Temperature is the validated highest of sensors: LMS-T20A, LMS-T20B, LMS-T20C, LMS-T20D, LMS-T20E, LMS-T20F, LMS-T20G, LMS-T20H, LMS-T20J, LMS-T20K, LMS-T20L, LMS-T20M, LMS-T20N, LMS-T20P, LMS-T20Q, LMS-T20R, LMS-T20S, LMS-T20T, LMS-T20U, LMS-T20V, LMS-T20W, LMS-T20X, LMS-T20Y

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	H2 CONC
Point ID	SSP-A58A
Plant Spec Point Desc.	H2 LVL TRAIN A HI/HIHI
Generic | Condensed Desc.	Containment Hydrogen Concentration
Analog | Digital	A
Engr Units | Dig States	%
Engr Units Conversion	Linear
Min Instrument Range	0
Max Instrument Range	10
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	S
Number of Sensors	1
How Processed	N/A
Sensor Locations	Hydrogen Recombiner Building
Alarm | Trip Setpoints	High = 1.4%, Hi-Hi = 1.8%
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.	Containment Hydrogen Concentration

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	BWST LEVEL
Point ID	QSS-L930
Plant Spec Point Desc.	REFUEL WTR STOR TK LVL
Generic | Condensed Desc.	Borated Water Storage Tank Level
Analog | Digital	A
Engr Units | Dig States	GAL
Engr Units Conversion	Linear
Min Instrument Range	0
Max Instrument Range	1,206,710
Zero Point Reference	Tank Bottom
Reference Point Notes	N/A
PROC | SENS	S
Number of Sensors	1
How Processed	N/A
Sensor Locations	Yard
Alarm | Trip Setpoints	Empty = 69,331 GAL, High = 1,189,000 GAL, Hi-Hi = 1,195,000 GAL
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.	Refueling Water Storage Tank Level

Date: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	WIND SPEED
Point ID	CVWS142MPH
Plant Spec Point Desc.	WIND SPEED 142 FT LEVEL
Generic | Condensed Desc.	Wind Speed at the Reactor Site
Analog | Digital	A
Engr Units | Dig States	MPH
Engr Units Conversion	Linear
Min Instrument Range	0
Max Instrument Range	100
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	1
How Processed	N/A
Sensor Locations	Yard
Alarm | Trip Setpoints	N/A
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: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	WIND DIR
Point ID	CVWD142
Plant Spec Point Desc.	WIND DIR 142 FT
Generic | Condensed Desc.	Wind Direction at the Reactor Site
Analog | Digital	A
Engr Units | Dig States	DEG
Engr Units Conversion	N/A
Min Instrument Range	0
Max Instrument Range	540
Zero Point Reference	North
Reference Point Notes	Measured in the 'from' direction
PROC | SENS	P
Number of Sensors	1
How Processed	N/A
Sensor Locations	Yard
Alarm | Trip Setpoints	N/A
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: June 21, 2000 Reactor Unit: MS3 Data Feeder: N/A

NRC ERDS Parameter	STAB CLASS
Point ID	CVDT142F
Plant Spec Point Desc.	DELTA TEMP BET 33 & 142
Generic | Condensed Desc.	Air Stability at the Reactor Site
Analog | Digital	A
Engr Units | Dig States	DEG F
Engr Units Conversion	Linear
Min Instrument Range	-10
Max Instrument Range	18
Zero Point Reference	N/A
Reference Point Notes	N/A
PROC | SENS	P
Number of Sensors	1
How Processed	N/A
Sensor Locations	Yard
Alarm | Trip Setpoints	N/A
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.	Delta Temperature is the difference in temperature between the 142 ft and 33 ft elevations