Xcel Energy®

Monticello Nuclear Generating Plant
2807 W County Road 75
Monticello, MN 55362

April 18, 2012

L-MT-12-035
10 CFR 50 Appendix
E.VI.3.a

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Monticello Nuclear Generating Plant
Docket 50-263
Renewed Facility Operating License No. DPR-22

Emergency Response Data System-Data Point Library Update

Pursuant to the requirements of 10 CFR 50, Appendix E, Section VI.3, "Maintaining the Emergency Response Data System," the Northern States Power Company, a Minnesota corporation (NSPM), doing business as Xcel Energy, the licensee for the Monticello Nuclear Generating Plant (MNGP), is submitting this letter to inform the NRC of updates to the Emergency Response Data System (ERDS) data point library implemented April 1, 2012. The ERDS data point library was revised to document replacement of 16 Meteorological Information and Dose Assessment System (MIDAS) computer points with Radiological Assessment System for Consequence Analysis (RASCAL) computer points. Enclosure 1 contains a summary of the revised computer points. Enclosure 2 contains a copy of the updated ERDS Data Point Library.

Summary of Commitments

This letter makes no new commitments or revisions to any existing commitments.

Timothy J. O'Connor
Site Vice-President
Monticello Nuclear Generating Plant
Northern States Power Company-Minnesota

Enclosures (2)

cc: Regional Administrator, Region III, USNRC
Project Manager, Monticello Nuclear Generating Plant, USNRC
Resident Inspector, Monticello Nuclear Generating Plant, USNRC

Enclosure 1

Monticello Nuclear Generating Plant

Summary of Changes to Data Point Library

(1 Page to follow)

Emergency Response Data System data point library (ERDS-SRS-1-10) was revised to document replacement of MIDAS computer points with RASCAL computer points as shown in the table below.

MIDAS Computer Point		RASCAL Computer Point	
MET110	MT 43M AVG DELTA TEMP A	MET140FR	MT 43M-10M A DELTA AIR T 15MRUN
MET113	MT 100M AVG DELTA TEMP B	MET139FR	MT 100M-10M B DELTA AIR T 15MRUN
MET111	MT 43M AVG DELTA TEMP B	MET141FR	MT 43M-10M B DELTA AIR T 15MRUN
MET112	MT 100M AVG DELTA TEMP A	MET138FR	MT 100M-10M A DELTA AIR T 15MRUN
MET106	MT 43M AVG WIND DIRECTA	MET128FR	MT 43M A WIND DIR 15MRUN
MET107	MT 43M AVG WIND DIRECTB	MET129FR	MT 43M B WIND DIR 15MRUN
MET108	MT 100M AVG WIND DIRECTA	MET126FR	MT 100M A WIND DIR 15MRUN
MET102	MT 43M AVG WIND SPEED A	MET122FR	MT 43M A WIND SPEED 15MRUN
MET103	MT 43M AVG WIND SPEED B	MET123FR	MT 43M B WIND SPEED 15MRUN
MET104	MT 100M AVG WIND SPEED A	MET120FR	MT 100M A WIND SPEED 15MRUN
MET105	MT 100M AVG WIND SPEED B	MET121FR	MT 100M B WIND SPEED 15MRUN
MET109	MT 100M AVG WIND DIRECTB	MET127FR	MT 100M B WIND DIR 15MRUN
PRM121	STACK EFF MONITOR CH A	PRM500FR	STACK EFF RAD A 15MRUN
PRM122	STACK EFF MONITOR CH B	PRM501FR	STACK EFF RAD B 15MRUN
PRM123	RBV EFFLUENT MONITOR CHA	PRM123FR	RBV EFFLUENT MONITOR CHA 15MAVG
PRM124	RBV EFFLUENT MONITOR CHB	PRM124FR	RBV EFFLUENT MONITOR CHB 15MAVGS

Enclosure 2

Monticello Nuclear Generating Plant

Process Computer System – Emergency Response Data System Data Point Library

(65 Pages to follow)

	Title:	Number:
SRS	Process Computer System - Emergency Response Data System (ERDS) - Data Point Library	ERDS-SRS-1-10
		Sheet No: 1

Prepared By: [signature] Effective Date: APRIL 1, 2012

Reviewed By: [signature] Approved By: [signature] 3/26/2012

LIST OF PAGES

SHEET	DESCRIPTION	REVISION and DATE
1	LIST OF PAGES	Revision 8, 5/12/06
2	NI POWER RANGE	Revision 8, 5/12/06
7	NI INTER RANGE	Revision 9, 5/06/09
8	NI SOURC RNG	Revision 9, 5/06/09
9	REAC VES LEV	Revision 9, 5/06/09
10	RCS PRESSURE	Revision 9, 5/06/09
11	MAIN FD FLOW	Revision 9, 5/06/09
13	HPCI FLOW	Revision 9, 5/06/09
14	RCIC FLOW	Revision 9, 5/06/09
15	LPCI FLOW	Revision 9, 5/06/09
19	CR SPRAY FL	Revision 9, 5/06/09
21	DW ED SMP LV	Revision 9, 5/06/09
22	DW FD SMP LV	Revision 9, 5/06/09
23	EFF GAS RAD	Revision 10, 3/15/12
27	EFF LIQ RAD	Revision 9, 5/06/09
33	COND A/E RAD	Revision 9, 5/06/09
35	DW RAD	Revision 9, 5/06/09
37	MN STEAM RAD	Revision 9, 5/06/09
38	DW PRESS	Revision 9, 5/06/09
39	DW TEMP	Revision 9, 5/06/09
40	SP TEMP	Revision 9, 5/06/09
41	SP LEVEL	Revision 9, 5/06/09
42	H2 CONC	Revision 9, 5/06/09
44	O2 CONC	Revision 9, 5/06/09
46	CST LEVEL	Revision 9, 5/06/09
48	WIND SPEED	Revision 10, 3/15/12
52	WIND DIR	Revision 10, 3/15/12
56	STAB CLASS	Revision 10, 3/15/12
60	Contacts	Revision 9, 5/06/09
63	Data Feeder Information	Revision 9, 5/06/09

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	NI POWER RNG
Point ID:	C51C4001
Plant Spec Point Desc.:	AVERAGE CONSISTENT APRM READING
Generic/Cond Desc.:	NUCLEAR INSTRUMENTS, POWER RANGE
Analog/Digital	A
Engr Units/Dig States:	%
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	125
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	P
Number of Sensors:	12
How Processed:	AVERAGE OF CONSISTENT APRMS
Sensor Location:	APRM UTILIZE 24 LPRMS LOCATED IN CORE
Alarm/Trip Set Points:	HI-HI TRIP=(.58W+62%),W=%RECIRC FLOW
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	DOWNSCALE(3%),INOP,BYPASS
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	This point consists of either an average of all consistent APRMs or an average of in-range APRMs if there are less than the required number of consistent signals. APRMS(Average Power Range Monitors) consist of an average of 24 LPRMs (Local Power Range Monitors). Each individual APRM signal will fail on Downscale(3%), Inop, or Bypass. HI-HI trip feed RPS SCRAM for one-out-of-three-twice logic. HI trip (.58W+50%) results in Rod Withdraw Block.

DATA POINT LIBRARY REFERENCE FILE

Date:	05/06/09
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	NI POWER RNG
Point ID:	NUI196
Plant Spec Point Desc.:	APRM #1
Generic/Cond Desc.:	NUCLEAR INSTRUMENTS, POWER RANGE
Analog/Digital	A
Engr Units/Dig States:	%
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	125
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	24
How Processed:	AVERAGE OF 24 LPRMs
Sensor Location:	APRM UTILIZE 24 LPRMs LOCATED IN CORE
Alarm/Trip Set Points:	Note A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation	N/A
For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	The APRM provides overall power range monitoring, the range monitored is from approximately 3 to 100% power. The reading of APRM is the average of 24 LPRM signals and provides output signal that are proportional to average neutron flux. The output signal is recorded on reactor control console recorder and indicated on the APRM Panel indicator. Trip circuit associated with APRM channel provides trip output signals to the RMCS rod withdrawal block circuits and the RPS scram circuitry.

Note A: Three Alarm/Trip Set Points:
HI-HI TRIP=(.66W+59.6%),W=%RECIRC FLOW
UPSCALE TRIP=119.5% (MODE SWITCH IN RUN)
UPSCALE TRIP=18% (MODE SWITCH NOT IN RUN)

SRS	Title: Process Computer System - Emergency Response Data System (ERDS) - Data Point Library	Number: ERDS-SRS-1-10 Sheet No: 4

DATA POINT LIBRARY REFERENCE FILE

Date:	05/06/09
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	NI POWER RNG
Point ID:	NUI197
Plant Spec Point Desc.:	APRM #4
Generic/Cond Desc.:	NUCLEAR INSTRUMENTS, POWER RANGE
Analog/Digital	A
Engr Units/Dig States:	%
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	125
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	24
How Processed:	AVERAGE OF 24 LPRMs
Sensor Location:	APRM UTILIZE 24 LPRMs LOCATED IN CORE
Alarm/Trip Set Points:	Note A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation	N/A
For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	The APRM provides overall power range monitoring, the range monitored is from approximately 3 to 100% power. The reading of APRM is the average of 24 LPRM signals and provides output signal that are proportional to average neutron flux. The output signal is recorded on reactor control console recorder and indicated on the APRM Panel indicator. Trip circuit associated with APRM channel provides trip output signals to the RMCS rod withdrawal block circuits and the RPS scram circuitry. Note A: Three Alarm/Trip Set Points: HI-HI TRIP=(.66W+59.6%),W=%RECIRC FLOW UPSCALE TRIP=119.5% (MODE SWITCH IN RUN) UPSCALE TRIP=18% (MODE SWITCH NOT IN RUN)

DATA POINT LIBRARY REFERENCE FILE

Date:	05/06/09
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	NI POWER RNG
Point ID:	NUI198
Plant Spec Point Desc.:	APRM #2
Generic/Cond Desc.:	NUCLEAR INSTRUMENTS, POWER RANGE
Analog/Digital	A
Engr Units/Dig States:	%
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	125
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	24
How Processed:	AVERAGE OF 24 LPRMs
Sensor Location:	APRM UTILIZE 24 LPRMs LOCATED IN CORE
Alarm/Trip Set Points:	sNote A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation	N/A
For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	The APRM provides overall power range monitoring, the range monitored is from approximately 3 to 100% power. The reading of APRM is the average of 24 LPRM signals and provides output signal that are proportional to average neutron flux. The output signal is recorded on reactor control console recorder and indicated on the APRM Panel indicator. Trip circuit associated with APRM channel provides trip output signals to the RMCS rod withdrawal block circuits and the RPS scram circuitry.

Note A: Three Alarm/Trip Set Points:
HI-HI TRIP=(.66W+59.6%),W=%RECIRC FLOW
UPSCALE TRIP=119.5% (MODE SWITCH IN RUN)
UPSCALE TRIP=18% (MODE SWITCH NOT IN RUN)

DATA POINT LIBRARY REFERENCE FILE

Date:	05/06/09
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	NI POWER RNG
Point ID:	NUI200
Plant Spec Point Desc.:	APRM #3
Generic/Cond Desc.:	NUCLEAR INSTRUMENTS, POWER RANGE
Analog/Digital	A
Engr Units/Dig States:	%
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	125
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	24
How Processed:	AVERAGE OF 24 LPRMs
Sensor Location:	APRM UTILIZE 24 LPRMs LOCATED IN CORE
Alarm/Trip Set Points:	Note A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation	N/A
For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	The APRM provides overall power range monitoring, the range monitored is from approximately 3 to 100% power. The reading of APRM is the average of 24 LPRM signals and provides output signal that are proportional to average neutron flux. The output signal is recorded on reactor control console recorder and indicated on the APRM Panel indicator. Trip circuit associated with APRM channel provides trip output signals to the RMCS rod withdrawal block circuits and the RPS scram circuitry.

Note A: Three Alarm/Trip Set Points:
HI-HI TRIP=(.66W+59.6%),W=%RECIRC FLOW
UPSCALE TRIP=119.5% (MODE SWITCH IN RUN)
UPSCALE TRIP=18% (MODE SWITCH NOT IN RUN)

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	NI INTER RNG
Point ID:	
Plant Spec Point Desc.:	(not available)
Generic/Cond Desc.:	NUCLEAR INSTRUMENTS, INTERMEDIATE RANGE
Analog/Digital	
Engr Units/Dig States:	
Engr Units Conversion:	
Minimum Instr Range:	
Maximum Instr Range:	
Zero Point Reference:	
Reference Point Notes:	
PROC or SENS:	
Number of Sensors:	
How Processed:	
Sensor Location:	
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-off Power Level:	
NI Detector Power Supply Turn-on Power Level:	
Instrument Failure Mode:	
Temperature Compensation For DP Transmitters:	
Level Reference Leg:	
Unique System Desc.:	Not available to Process Computer System.

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	NI SOURC RNG
Point ID:	
Plant Spec Point Desc.:	(not available)
Generic/Cond Desc.:	NUCLEAR INSTRUMENTS, SOURCE RANGE
Analog/Digital	
Engr Units/Dig States:	
Engr Units Conversion:	
Minimum Instr Range:	
Maximum Instr Range:	
Zero Point Reference:	
Reference Point Notes:	
PROC or SENS:	
Number of Sensors:	
How Processed:	
Sensor Location:	
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-off Power Level:	
NI Detector Power Supply Turn-on Power Level:	
Instrument Failure Mode:	
Temperature Compensation For DP Transmitters:	
Level Reference Leg:	
Unique System Desc.:	Not available to Process Computer System.

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	REAC VES LEV
Point ID:	B21C0010
Plant Spec Point Desc.:	RPV VALIDATED WATER LEVEL
Generic/Cond Desc.:	REACTOR VESSEL WATER LEVEL
Analog/Digital	A
Engr Units/Dig States:	INCHES
Engr Units Conversion:	N/A
Minimum Instr Range:	-350
Maximum Instr Range:	350
Zero Point Reference:	MSSKRT
Reference Point Notes:	0" CORRESPONDS TO 126" ABOVE TOP OF FUEL
PROC or SENS:	P
Number of Sensors:	28
How Processed:	WEIGHTED AVERAGE OF CONSISTENT LEVELS
Sensor Location:	LEVEL REF LEGS - 5 HOT(IN DW) & 2 COLD
Alarm/Trip Set Points:	-48"=ECCS INIT, 9"=SCRAM, 48"=HI TRIP
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	+280" TOP OF REACTOR HEAD
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	WET
Unique System Desc.:	This point consists of either a weighted average of all consistent level indicators or an average of in-range level indicators if there are less than the required number of consistent signals. Algorithm performs temperature compensation and evaluates reference leg flashing on 7 level signals. Safeguards Levels (-50" to 50") utilize cold reference leg design outside of drywell. ECCS levels (-335" to 65") are invalidated with recirc pumps running. Other levels include 2 feedwater (0 to 60") and 1 vessel flood (-50" to 350").

DATA POINT LIBRARY REFERENCE FILE

Date:	01/19/93
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	RCS PRESSURE
Point ID:	B21C0210
Plant Spec Point Desc.:	RPV VALIDATED PRESSURE
Generic/Cond Desc.:	REACTOR COOLANT SYSTEM PRESSURE
Analog/Digital	A
Engr Units/Dig States:	PSIG
Engr Units Conversion:	N/A
Minimum Instr Range:	0.00
Maximum Instr Range:	1500
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	P
Number of Sensors:	3
How Processed:	WEIGHTED AVERAGE OF CONSISTENT LEVELS
Sensor Location:	PRESSURE SENSED OFF LEVEL REF LEGS
Alarm/Trip Set Points:	1056 PSIG=SCRAM
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HI/LOW SENSOR
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	This point consists of either a weighted average of all consistent pressure indicators or an average of in-range pressure level indicators if there are less than the required number of consistent signals.

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	MAIN FD FLOW
Point ID:	C51C9001
Plant Spec Point Desc.:	SMOOTHED FEEDWATER FLOW LOOP A
Generic/Cond Desc.:	FEEDWATER FLOW INTO THE REACTOR SYSTEM
Analog/Digital	A
Engr Units/Dig States:	MLB/HR
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	4
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	P
Number of Sensors:	4
How Processed:	SMOOTHED FW FLOW CALC FROM A NOZZLE D/P
Sensor Location:	FW NOZZLE IS DOWNSTREAM OF RX FW PUMPS
Alarm/Trip Set Points:	N/A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HI/LOW SENSOR
Temperature Compensation	N/A
For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	SMOOTHED FW FLOW LOOP A is calculated using Feedwater nozzle D/P, Pressure, and temperature. Smoothing algorithm sums 1/12 current sample + 11/12 of previous smoothed value. Sampling frequency is 5 seconds. Feedwater nozzles are located downstream of Reactor Feedwater Pumps and ahead of high pressure heaters.

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	MAIN FD FLOW
Point ID:	C51C9002
Plant Spec Point Desc.:	SMOOTHED FEEDWATER FLOW LOOP B
Generic/Cond Desc.:	FEEDWATER FLOW INTO THE REACTOR SYSTEM
Analog/Digital	A
Engr Units/Dig States:	MLB/HR
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	4
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	P
Number of Sensors:	4
How Processed:	SMOOTHED FW FLOW CALC FROM B NOZZLE D/P
Sensor Location:	FW NOZZLE IS DOWNSTREAM OF RX FW PUMPS
Alarm/Trip Set Points:	N/A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HI/LOW SENSOR
Temperature Compensation	N/A
For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	SMOOTHED FW FLOW LOOP B is calculated using Feedwater nozzle D/P, Pressure, and temperature. Smoothing algorithm sums 1/12 current sample + 11/12 of previous smoothed value. Sampling frequency is 5 seconds. Feedwater nozzles are located downstream of Reactor Feedwater Pumps and ahead of high pressure heaters.

DATA POINT LIBRARY REFERENCE FILE

Date:	01/19/93
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	HPCI FLOW
Point ID:	HPC100
Plant Spec Point Desc.:	HPCI PUMP DISCHARGE FLOW
Generic/Cond Desc.:	HIGH PRESSURE COOLANT INJECTION FLOW
Analog/Digital	A
Engr Units/Dig States:	GPM
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	3500
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	SIGNAL INPUT FROM FLOW TRANSMITTER
Sensor Location:	FLOW ELEMENT ON HPCI PUMP DISHARGE
Alarm/Trip Set Points:	N/A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation	N/A
For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	HPCI is a steam turbine driven pump designed to deliver 2700 gpm over reactor pressure range of 150-1120 psig. Flow element is located on pump disharge line ahead of the test return line to the CST tanks and injection line into "B" feedwater line. HPCI injects into feedwater line prior to the line entering containment.

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	RCIC FLOW
Point ID:	RCI100
Plant Spec Point Desc.:	RCIC PUMP DISCHARGE FLOW
Generic/Cond Desc.:	REACTOR CORE ISOLATION COOLING
Analog/Digital	A
Engr Units/Dig States:	GPM
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	500
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	SIGNAL INPUT FROM FLOW TRANSMITTER
Sensor Location:	FLOW ELEMENT ON RCIC PUMP DISHARGE
Alarm/Trip Set Points:	N/A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	RCIC is a steam turbine driven pump designed to deliver 400 gpm over reactor pressure range of 150-1120 psig. Flow element is located on pump disharge line ahead of the test return line to the CST tanks and injection line into "A" feedwater line. RCIC injects into feedwater line prior to the line entering containment.

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	LPCI FLOW
Point ID:	RHR100
Plant Spec Point Desc.:	CONTAINMENT SPRAY/COOLING A LOOP
Generic/Cond Desc.:	LOW PRESSURE COOLANT INJECTION FLOW
Analog/Digital	A
Engr Units/Dig States:	GPM
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	10000
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	SIGNAL INPUT FROM FLOW TRANSMITTER
Sensor Location:	DISCHARGE OF RHR HEAT EXCHANGERS
Alarm/Trip Set Points:	N/A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation	N/A
For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	CONTAINMENT SPRAY/COOLING A LOOP flow is the RHR flow to the A loop drywell spray, torus spray and torus cooling. Each RHR pump is approximately rated at 4000 gpm depending on system head. Two pumps are located in each loop although flow can be cross tied between A and B loops.

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	LPCI FLOW
Point ID:	RHR101
Plant Spec Point Desc.:	CONTAINMENT SPRAY/COOLING B LOOP
Generic/Cond Desc.:	LOW PRESSURE COOLANT INJECTION FLOW
Analog/Digital	A
Engr Units/Dig States:	GPM
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	10000
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	SIGNAL INPUT FROM FLOW TRANSMITTER
Sensor Location:	DISCHARGE OF RHR HEAT EXCHANGERS
Alarm/Trip Set Points:	N/A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	CONTAINMENT SPRAY/COOLING B LOOP flow is the RHR flow to the B loop drywell spray, torus spray and torus cooling. Each RHR pump is approximately rated at 4000 gpm depending on system head. Two pumps are located in each loop although flow can be cross tied between A and B loops.

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	LPCI FLOW
Point ID:	RHR102
Plant Spec Point Desc.:	RHR LOOP A INJECT FLOW
Generic/Cond Desc.:	LOW PRESSURE COOLANT INJECTION FLOW
Analog/Digital	A
Engr Units/Dig States:	GPM
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	10000
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	SIGNAL INPUT FROM FLOW TRANSMITTER
Sensor Location:	DISCHARGE OF RHR HEAT EXCHANGERS
Alarm/Trip Set Points:	N/A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation	N/A
For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	RHR LOOP A INJECT FLOW is the RHR flow to the A Recirc Loop, Reactor Head Cooling, Waste Surge Tank, and cross tie to B Loop. Each RHR pump is rated at about 4000 gpm depending on system head. Two pumps are located in each loop although flow can be cross tied between A and B loops.

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	LPCI FLOW
Point ID:	RHR103
Plant Spec Point Desc.:	RHR LOOP B INJECT FLOW
Generic/Cond Desc.:	LOW PRESSURE COOLANT INJECTION FLOW
Analog/Digital	A
Engr Units/Dig States:	GPM
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	10000
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	SIGNAL INPUT FROM FLOW TRANSMITTER
Sensor Location:	DISCHARGE OF RHR HEAT EXCHANGERS
Alarm/Trip Set Points:	N/A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation	N/A
For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	RHR LOOP B INJECT FLOW is the RHR flow to the B Recirc Loop and cross tie to A Loop. Each RHR pump is rated at about 4000 gpm depending on system head. Two pumps are located in each loop although flow can be cross tied between A and B loops.

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	CR SPRAY FL
Point ID:	CSP100
Plant Spec Point Desc.:	CS LOOP 11 FLOW
Generic/Cond Desc.:	Core Spray Cooling System Flow
Analog/Digital	A
Engr Units/Dig States:	GPM
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	5000
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	SIGNAL INPUT FROM FLOW TRANSMITTER
Sensor Location:	ON PUMP DISCHARGE LINE
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	The loop A Core Spray system consists of one electric driven pump designed to deliver 3020 gpm against a system head corresponding to a reactor pressure of 130psi above containment pressure. The flow element is located on the pump discharge line just a head of the reactor vessel injection and test return lines.

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	CR SPRAY FL
Point ID:	CSP101
Plant Spec Point Desc.:	CS LOOP 12 FLOW
Generic/Cond Desc.:	CORE SPRAY COOLING SYSTEM FLOW
Analog/Digital	A
Engr Units/Dig States:	GPM
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	5000
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	SIGNAL INPUT FROM FLOW TRANSMITTER
Sensor Location:	ON PUMP DISCHARGE LINE
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	The loop B Core Spray system consists of one electric driven pump designed to deliver 3020 gpm against a system head corresponding to a reactor pressure of 130psi above containment pressure. The flow element is located on the pump discharge line just a head of the reactor vessel injection and test return lines.

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	DW ED SMP LV
Point ID:	PCT138
Plant Spec Point Desc.:	DW EQUIP DRAIN SUMP VOL
Generic/Cond Desc.:	DRYWELL FLOOR DRAIN SUMP LEVEL
Analog/Digital	A
Engr Units/Dig States:	GAL
Engr Units Conversion:	N/A
Minimum Instr Range:	164
Maximum Instr Range:	565
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	SIGNAL INPUT FROM LEVEL TRANSMITTER
Sensor Location:	DIRECTLY BELOW RX VESSEL IN DRYWELL
Alarm/Trip Set Points:	HI=555
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	This sump collects liquid effluent from valve stem leak-offs, Rx Recirc Pump and piping maintenance drains, reactor well bulkhead and bellows drains, reactor vessel flange leakoff and Drywell Equipment Drain Sump heat exchanger drain. Two 50 GPM pumps discharge the water to the Waste Collector Tank in the Reactor building. Sump is isolated by Group II Isolation or manually from control room. Sump overflows into Drywell Floor Drain Sump at 1090 Gallons.

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	DW FD SMP LV
Point ID:	PCT139
Plant Spec Point Desc.:	DW FLOOR DRAIN SUMP VOL
Generic/Cond Desc.:	DRYWELL FLOOR DRAIN SUMP LEVEL
Analog/Digital	A
Engr Units/Dig States:	GAL
Engr Units Conversion:	N/A
Minimum Instr Range:	164
Maximum Instr Range:	565
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	SIGNAL INPUT FROM LEVEL TRANSMITTER
Sensor Location:	DIRECTLY BELOW RX VESSEL IN DRYWELL
Alarm/Trip Set Points:	HI=555
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	This sump collects liquid effluent from Drywell cooler drains, floor drains, control rod drive leakage and drains, closed cooling water piping drains, and piping and equipment maintenance vents. Two 50 GPM pumps discharge the water to the Floor Drain Collector Tank in the Reactor building. Sump is isolated by Group II Isolation or manually from control room. Sump overflows into Drywell Equipment Drain Sump at 1090 Gallons.

DATA POINT LIBRARY REFERENCE FILE

Date:	3/15/12
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	EFF GAS RAD
Point ID:	PRM500FR
Plant Spec Point Desc.:	STACK EFF RAD A 15MRUN
Generic/Cond Desc.:	RADIOACTIVITY OF RELEASED GASES
Analog/Digital:	A
Engr Units/Dig States:	uCI/S
Engr Units Conversion:	N/A
Minimum Instr Range:	1
Maximum Instr Range:	10E12
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	P
Number of Sensors:	1
How Processed:	15 MINUTE AVERAGE OF 5 SECOND VALUES
Sensor Location:	FOUR ISOKINETIC PROBES IN OFF GAS STACK
Alarm/Trip Set Points:	N/A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Data is collected every five seconds, averaged every minute, and stored in data files as 15-minute average.

DATA POINT LIBRARY REFERENCE FILE

Date:	3/15/12
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	EFF GAS RAD
Point ID:	PRM501FR
Plant Spec Point Desc.:	STACK EFF RAD B 15MRUN
Generic/Cond Desc.:	RADIOACTIVITY OF RELEASED GASES
Analog/Digital:	A
Engr Units/Dig States:	uCI/S
Engr Units Conversion:	N/A
Minimum Instr Range:	1
Maximum Instr Range:	10E12
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	P
Number of Sensors:	1
How Processed:	15 MINUTE AVERAGE OF 5 SECOND VALUES
Sensor Location:	FOUR ISOKINETIC PROBES IN OFF GAS STACK
Alarm/Trip Set Points:	N/A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Data is collected every five seconds, averaged every minute, and stored in data files as 15-minute average.

DATA POINT LIBRARY REFERENCE FILE

Date:	3/15/12
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	EFF GAS RAD
Point ID:	PRM123FR
Plant Spec Point Desc.:	RBV EFFLUENT MONITOR CHA 15MAVG
Generic/Cond Desc.:	RADIOACTIVITY OF RELEASED GASES
Analog/Digital:	A
Engr Units/Dig States:	uCI/S
Engr Units Conversion:	N/A
Minimum Instr Range:	1
Maximum Instr Range:	10E12
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	P
Number of Sensors:	1
How Processed:	15 MINUTE AVERAGE OF 5 SECOND VALUES
Sensor Location:	ISOKINETIC PROBES IN EACH RX BLDG VENT
Alarm/Trip Set Points:	N/A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Data is collected every five seconds, averaged every minute, and stored in data files as 15-minute average.

DATA POINT LIBRARY REFERENCE FILE

Date:	3/15/12
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	EFF GAS RAD
Point ID:	PRM124FR
Plant Spec Point Desc.:	RBV EFFLUENT MONITOR CHB 15MAVG
Generic/Cond Desc.:	RADIOACTIVITY OF RELEASED GASES
Analog/Digital:	A
Engr Units/Dig States:	uCI/S
Engr Units Conversion:	N/A
Minimum Instr Range:	1
Maximum Instr Range:	10E12
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	P
Number of Sensors:	1
How Processed:	15 MINUTE AVERAGE OF 5 SECOND VALUES
Sensor Location:	ISOKINETIC PROBES IN EACH RX BLDG VENT
Alarm/Trip Set Points:	N/A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Data is collected every five seconds, averaged every minute, and stored in data files as 15-minute average.

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	EFF LIQ RAD
Point ID:	PRM107
Plant Spec Point Desc.:	SERVICE WATER EFFLUENT
Generic/Cond Desc.:	RADIOACTIVITY OF RELEASED LIQUIDS
Analog/Digital:	A
Engr Units/Dig States:	CPS
Engr Units Conversion:	uCi/Ml=((PRM107 in CPS)-5)*(4.3E-7)
Minimum Instr Range:	.1
Maximum Instr Range:	10E6
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	SIGNAL INPUT FROM MONITOR
Sensor Location:	SAMPLES SW PRIOR TO SW LEAVING RX BLDG
Alarm/Trip Set Points:	HI=20; HI-HI=31400
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	DOWNSCALE & UPSCALE
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Gamma radiation emitted by radioactive materials contained in process liquid are detected by a scintillation detector housed in shielded sampler. Sidestream sample is used from the service water line prior to leaving the Reactor Building. After leaving Reactor Building, line discharges into circ water discharge pipe. Alarm setpoints vary with plant operation as determined by plant chemist.

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	EFF LIQ RAD
Point ID:	PRM109
Plant Spec Point Desc.:	RADWASTE EFFLUENT
Generic/Cond Desc.:	RADIOACTIVITY OF RELEASED LIQUIDS
Analog/Digital:	A
Engr Units/Dig States:	CPS
Engr Units Conversion:	uCi/Ml=((PRM109 in CPS)-7)*(2.5E-6)
Minimum Instr Range:	.1
Maximum Instr Range:	10E6
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	SIGNAL INPUT FROM MONITOR
Sensor Location:	SAMPLED PRIOR TO LEAVING RADWASTE BLDG
Alarm/Trip Set Points:	HI=70; HI-HI=10000000
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	DOWNSCALE & UPSCALE, INOP
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Gamma radiation emitted by radioactive materials contained in process liquid are detected by a scintillation detector housed in shielded sampler. Liquid is sampled prior to leaving the Radwaste Building. After leaving Radwaste Building, line discharges into discharge canal. Although Monticello has permits, Monticello maintains a policy of zero liquid radwaste releases into the river. Alarm setpoints vary with plant operation as determined by plant chemist.

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	EFF LIQ RAD
Point ID:	PRM110
Plant Spec Point Desc.:	TB NORMAL WASTE SUMP CH A
Generic/Cond Desc.:	RADIOACTIVITY OF RELEASED LIQUIDS
Analog/Digital:	A
Engr Units/Dig States:	CPM
Engr Units Conversion:	uCi/Ml=((PRM110 in CPM)-400)*(3.5E-9)
Minimum Instr Range:	10
Maximum Instr Range:	10E6
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	SIGNAL INPUT FROM MONITOR
Sensor Location:	SAMPLED PRIOR TO LEAVING TURBINE BLDG
Alarm/Trip Set Points:	HI=4000;HI-HI=3780000
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	DOWNSCALE & UPSCALE, INOP
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Gamma radiation emitted by radioactive materials contained in process liquid are detected by a scintillation detectors in dry tube in sump. Sampled prior to leaving the Turbine Building. Alarm setpoints vary with plant operation as determined by plant chemist.

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	EFF LIQ RAD
Point ID:	PRM111
Plant Spec Point Desc.:	TB NORMAL WASTE SUMP CH B
Generic/Cond Desc.:	RADIOACTIVITY OF RELEASED LIQUIDS
Analog/Digital:	A
Engr Units/Dig States:	CPM
Engr Units Conversion:	uCi/Ml=((PRM111 in CPM)-400)*(3.5E-9)
Minimum Instr Range:	10
Maximum Instr Range:	10E6
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	SIGNAL INPUT FROM MONITOR
Sensor Location:	SAMPLED PRIOR TO LEAVING TURBINE BLDG
Alarm/Trip Set Points:	HI=4000;HI-HI=3780000
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	DOWNSCALE & UPSCALE, INOP
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Gamma radiation emitted by radioactive materials contained in process liquid are detected by a scintillation detectors in dry tube in sump. Sampled prior to leaving the Turbine Building. Alarm setpoints vary with plant operation as determined by plant chemist.

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	EFF LIQ RAD
Point ID:	PRM112
Plant Spec Point Desc.:	DISCHARGE CANAL MONITOR A
Generic/Cond Desc.:	RADIOACTIVITY OF RELEASED LIQUIDS
Analog/Digital:	A
Engr Units/Dig States:	CPS
Engr Units Conversion:	uCi/Ml=((PRM112 in CPS)-2)*(1.4E-7)
Minimum Instr Range:	.1
Maximum Instr Range:	10E6
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	SIGNAL INPUT FROM MONITOR
Sensor Location:	550FT DOWNSTREAM FROM DISCHARGE STRUCTURE
Alarm/Trip Set Points:	HI=40; HI-HI=93000
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	DOWNSCALE & UPSCALE, INOP
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Gamma radiation emitted by radioactive materials contained in process liquid are detected by a scintillation detectors. Sample is drawn from 4 standpipes in canal 550 feet downstream from the discharge structure. Alarm setpoints vary with plant operation as determined by plant chemist.

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	EFF LIQ RAD
Point ID:	PRM113
Plant Spec Point Desc.:	DISCHARGE CANAL MONITOR B
Generic/Cond Desc.:	RADIOACTIVITY OF RELEASED LIQUIDS
Analog/Digital:	A
Engr Units/Dig States:	CPS
Engr Units Conversion:	uCi/Ml=((PRM113 in CPS)-2)*(1.4E-7)
Minimum Instr Range:	.1
Maximum Instr Range:	10E6
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	SIGNAL INPUT FROM MONITOR
Sensor Location:	550FT DOWNSTREAM FROM DISCHARGE STRUCTURE
Alarm/Trip Set Points:	HI=40; HI-HI=93000
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	DOWNSCALE & UPSCALE, INOP
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Gamma radiation emitted by radioactive materials contained in process liquid are detected by a scintillation detectors. Sample is drawn from 4 standpipes in canal 550 feet downstream from the discharge structure. Alarm setpoints vary with plant operation as determined by plant chemist.

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	CND A/E RAD
Point ID:	PRM118
Plant Spec Point Desc.:	OFF GAS CH 1
Generic/Cond Desc.:	CONDENSER AIR EJECTOR RADIOACTIVITY
Analog/Digital:	A
Engr Units/Dig States:	MR/HR
Engr Units Conversion:	N/A
Minimum Instr Range:	1
Maximum Instr Range:	10E6
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	SIGNAL OUTPUT FROM MONITOR
Sensor Location:	SAMPLE DRAWN FROM OFF GAS LINE
Alarm/Trip Set Points:	HI=2500; HI-HI=200000
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	LOW
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	OFF GAS CH 1 radiation monitor is positioned adjacent to a vertical sample chamber. A continuous sample is drawn from the off gas line downstream from the Steam Jet Air Ejectors and ahead of the Recombiner trains. The sample is monitored after a time delay of approximately 2 minutes to permit Nitrogen-16 and Oxygen-19 to decay. Alarm setpoints vary with plant operation as determined by plant chemist.

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	CND A/E RAD
Point ID:	PRM119
Plant Spec Point Desc.:	OFF GAS CH 2
Generic/Cond Desc.:	CONDENSER AIR EJECTOR RADIOACTIVITY
Analog/Digital:	A
Engr Units/Dig States:	MR/HR
Engr Units Conversion:	N/A
Minimum Instr Range:	1
Maximum Instr Range:	10E6
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	SIGNAL OUTPUT FROM MONITOR
Sensor Location:	SAMPLE DOWNSTREAM OF STEAM JET AIR EJECT
Alarm/Trip Set Points:	HI=2500; HI-HI=200000
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	LOW
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	OFF GAS CH 2 radiation monitor is positioned adjacent to a vertical sample chamber. A continuous sample is drawn from the off gas line downstream from the Steam Jet Air Ejectors and ahead of the Recombiner trains. The sample is monitored after a time delay of approximately 2 minutes to permit Nitrogen-16 and Oxygen-19 to decay. Alarm setpoints vary with plant operation as determined by plant chemist.

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	DW RAD
Point ID:	PCT109
Plant Spec Point Desc.:	DRYWELL RADIATION CH A
Generic/Cond Desc.:	RADIATION LEVEL IN THE DRYWELL
Analog/Digital:	A
Engr Units/Dig States:	R/HR
Engr Units Conversion:	N/A
Minimum Instr Range:	1
Maximum Instr Range:	10E8
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	SIGNAL INPUT FROM RADIATION MONITOR
Sensor Location:	DRYWELL 180 DEGREE AZIMUTH AT 944'
Alarm/Trip Set Points:	HI=49.999, HI-HI=35
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH SENSOR, INOP
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Purpose is to provide estimate of core damage by measuring drywell gamma radiation fields caused by fission product leakage from the core. Each sensor is an ionization chamber with an internal U-234 source which gives 1R/HR reading for operation verification. Elevation 944' is just below bottom of reactor vessel (949').

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	DW RAD
Point ID:	PCT110
Plant Spec Point Desc.:	DRYWELL RADIATION CH B
Generic/Cond Desc.:	RADIATION LEVEL IN THE DRYWELL
Analog/Digital:	A
Engr Units/Dig States:	R/HR
Engr Units Conversion:	N/A
Minimum Instr Range:	1
Maximum Instr Range:	10E8
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	SIGNAL INPUT FROM RADIATION MONITOR
Sensor Location:	DRYWELL 0 DEGREE AZIMUTH AT 944'
Alarm/Trip Set Points:	HI=49.999, HI-HI=35
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Sply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH SENSOR, INOP
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Purpose is to provide estimate of core damage by measuring drywell gamma radiation fields caused by fission product leakage from the core. Each sensor is an ionization chamber with an internal U-234 source which gives 1R/HR reading for operation verification. Elevation 944' is just below bottom of reactor vessel (949').

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	MN STEAM RAD
Point ID:	
Plant Spec Point Desc.:	(not available)
Generic/Cond Desc.:	RADIATION LEVEL OF THE MAIN STEAM LINE
Analog/Digital:	
Engr Units/Dig States:	
Engr Units Conversion:	
Minimum Instr Range:	
Maximum Instr Range:	
Zero Point Reference:	
Reference Point Notes:	
PROC or SENS:	
Number of Sensors:	
How Processed:	
Sensor Location:	
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-off Power Level:	
NI Detector Power Supply Turn-on Power Level:	
Instrument Failure Mode:	
Temperature Compensation For DP Transmitters:	
Level Reference Leg:	
Unique System Desc.:	Not available to Process Computer System.

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	DW PRESS
Point ID:	D23C0010
Plant Spec Point Desc.:	VALIDATED DRYWELL PRESSURE
Generic/Cond Desc.:	DRYWELL PRESSURE
Analog/Digital:	A
Engr Units/Dig States:	PSIG
Engr Units Conversion:	N/A
Minimum Instr Range:	-5
Maximum Instr Range:	250
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	P
Number of Sensors:	4
How Processed:	WEIGHTED AVERAGE OF CONSISTENT DW PRESS
Sensor Location:	SENSING LINES FROM DRYWELL
Alarm/Trip Set Points:	ALARMS LOW=0.1, HIGH=1.5
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	This point consists of either a weighted average of all consistent drywell pressure or an average of in-range drywell pressures if there are less than the required number of consistent singals. Four drywell pressure signals consist of one narrow range (-2 to 3), one wide range (0 to 80) and two accident (-5 to 250) ranges. Weighted averages produces average that is weighted based on instrument accuracy. Drywell internal design pressure is 56 PSIG at 281 Degrees F. At 2 PSIG, RPS initiates Reactor SCRAM and Primary Containment Isolation initiates Group 2 & 3.

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	DW TEMP
Point ID:	D23C0310
Plant Spec Point Desc.:	VALIDATED DRYWELL TEMPERATURE
Generic/Cond Desc.:	DRYWELL TEMPERATURE
Analog/Digital:	A
Engr Units/Dig States:	DEGF
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	600
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	P
Number of Sensors:	16
How Processed:	AVERAGE OF CONSISTENT DW TEMPERAURES
Sensor Location:	16 SENSORS AT 8 DRYWELL LOCATIONS
Alarm/Trip Set Points:	HI=150 DEGF
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	This point consists of either a weighted average bulk temperature of consistent regional temperatures or an unvalidated, non-weighted average of all in-range drywell temperatures. Regional weighting factors compensate for differences in drywell volume at the various elevations. Each location utilizes two sensors and are located in Drywell at: Elev 932' (East & West), Elev 951'(North & South), Elev 970' (East & West), and Elev 994' (North & South).

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	SP TEMP
Point ID:	D23C0210
Plant Spec Point Desc.:	VALIDATED TORUS TEMPERATURE
Generic/Cond Desc.:	SUPPRESSION POOL TEMPERATURE
Analog/Digital:	A
Engr Units/Dig States:	DEGF
Engr Units Conversion:	N/A
Minimum Instr Range:	30
Maximum Instr Range:	240
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	P
Number of Sensors:	16
How Processed:	AVERAGE OF 2 SPOTMOS (8 SENSORS EACH)
Sensor Location:	2 SENSORS IN EACH OF 8 TORUS SRV BAYS
Alarm/Trip Set Points:	HIGH=90
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR, SPOTMOS INOP
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	VALIDATED TORUS TEMPERATURE is the average of the inputs from two Suppression Pool Temperature Monitoring Systems (SPOTMOS). Each system generates an average of eight sensors. Each sensor is located in one of the eight bays that Safety Relief Valves discharge into.

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	SP LEVEL
Point ID:	G43C0015
Plant Spec Point Desc.:	VALIDATED TORUS WATER LEVEL
Generic/Cond Desc.:	SUPPRESSION POOL WATER LEVEL
Analog/Digital:	A
Engr Units/Dig States:	INCHES
Engr Units Conversion:	N/A
Minimum Instr Range:	-96
Maximum Instr Range:	180
Zero Point Reference:	N/A
Reference Point Notes:	0"=ELEVATION 910'= 530,000 GALLONS
PROC or SENS:	P
Number of Sensors:	4
How Processed:	WEIGHTED AVERAGE OF CONSISTENT LEVELS
Sensor Location:	LEVEL TAPS OFF TORUS SHELL
Alarm/Trip Set Points:	HIGH=2, LO=-2
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	This point consists of either a weighted average of all consistent torus water levels or an average of in-range torus water levels if there are less than the required number of consistent signals. Four torus water level signals consist of two narrow range (-15 to 15) and two wide range (-96 to 180). Weighted averages produce an average that is based on instrument accuracy. HPCI suction transfer occurs at 2". Tech Specs level greater than -4" and less than 2.9".

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	H2 CONC
Point ID:	PCT116
Plant Spec Point Desc.:	PCTMT H2 ANALYZER A
Generic/Cond Desc.:	DRYWELL OR TORUS HYDROGEN CONCENTRATION
Analog/Digital:	A
Engr Units/Dig States:	%
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	20
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	SIGNAL OUTPUT FROM H2 ANALYZER
Sensor Location:	SAMPLE LINES UPPER DW,TORUS,CGCS IN & OUT
Alarm/Trip Set Points:	N/A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR, SYSTEM OFF
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Analyzers are normally shutdown and values will usually read less than 0.75%. System is capable of analyzing samples from Drywell (elev 994'), Torus and Combustible Gas Control System inlet and outlet. Sample line and sample return valves close on Group 2 Isolation.

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	H2 CONC
Point ID:	PCT117
Plant Spec Point Desc.:	PCTMT H2 ANALYZER B
Generic/Cond Desc.:	DRYWELL OR TORUS HYDROGEN CONCENTRATION
Analog/Digital:	A
Engr Units/Dig States:	%
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	20
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	SIGNAL OUTPUT FROM H2 ANALYZER
Sensor Location:	SAMPLE LINES UPPER DW,TORUS,CGCS IN & OUT
Alarm/Trip Set Points:	N/A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR, SYSTEM OFF
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Analyzers are normally shutdown and values will usually read less than 0.75%. System is capable of analyzing samples from Drywell (elev 994'), Torus and Combustible Gas Control System inlet and outlet. Sample line and sample return valves close on Group 2 Isolation.

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	O2 CONC
Point ID:	PCT118
Plant Spec Point Desc.:	PCTMT O2 ANALYZER A
Generic/Cond Desc.:	DRYWELL OR TORUS OXYGEN CONCENTRATION
Analog/Digital:	A
Engr Units/Dig States:	%
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	25
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	SIGNAL OUTPUT FROM O2 ANALYZER
Sensor Location:	SAMPLE LINES UPPER DW,TORUS,CGCS IN & OUT
Alarm/Trip Set Points:	N/A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR, SYSTEM OFF
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Analyzers are normally shutdown and values will usually read less than 0.75%. System is capable of analyzing samples from Drywell (elev 994'), Torus and Combustible Gas Control System inlet and outlet. Sample line and sample return valves close on Group 2 Isolation. Normal operation concentrations are 2.4%.

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	O2 CONC
Point ID:	PCT119
Plant Spec Point Desc.:	PCTMT O2 ANALYZER B
Generic/Cond Desc.:	DRYWELL OR TORUS OXYGEN CONCENTRATION
Analog/Digital:	A
Engr Units/Dig States:	%
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	25
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	SIGNAL OUTPUT FROM O2 ANALYZER
Sensor Location:	SAMPLE LINES UPPER DW,TORUS,CGCS IN & OUT
Alarm/Trip Set Points:	N/A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR, SYSTEM OFF
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Analyzers are normally shutdown and values will usually read less than 0.75%. System is capable of analyzing samples from Drywell (elev 994'), Torus and Combustible Gas Control System inlet and outlet. Sample line and sample return valves close on Group 2 Isolation. Normal operation concentrations are 2.4%.

	Title:	Number:
SRS	Process Computer System - Emergency Response Data System (ERDS) - Data Point Library	ERDS-SRS-1-10
		Sheet No: 46

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	CST LEVEL
Point ID:	CST100
Plant Spec Point Desc.:	CST TANK LEVEL A
Generic/Cond Desc.:	CONDENSATE STORAGE TANK LEVEL
Analog/Digital:	A
Engr Units/Dig States:	FEET
Engr Units Conversion:	N/A
Minimum Instr Range:	5
Maximum Instr Range:	30
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	SIGNAL FROM LEVEL TRANSMITTER
Sensor Location:	LEVEL TX ON WATER COLUMN IN RX BLDG
Alarm/Trip Set Points:	HI=24'(225,600gal) LO=11.5'(108,100gal)
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	LOW
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Condensate Storage Tank (CST) Level A is the water level in the A CST. Two CSTs exist with a tank capacity of 230,000 gallons each. Makeup condensate water is provided through 3 electric pumps from the CST tanks to various plant systems. Each tank has suction line for Control Rod Drive, HPCI, Core Spray, RHR, and RCIC systems. At 7'(65,800gal) receive CST Low-Low Level alarm and condensate service pumps trip. At 2'8"(25,100gal) HPCI and RCIC transfer to Torus suction.

DATA POINT LIBRARY REFERENCE FILE

Date:	01/07/92
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	CST LEVEL
Point ID:	CST101
Plant Spec Point Desc.:	CST TANK LEVEL B
Generic/Cond Desc.:	CONDENSATE STORAGE TANK LEVEL
Analog/Digital:	A
Engr Units/Dig States:	FEET
Engr Units Conversion:	N/A
Minimum Instr Range:	5
Maximum Instr Range:	30
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How Processed:	SIGNAL FROM LEVEL TRANSMITTER
Sensor Location:	LEVEL TX ON WATER COLUMN IN RX BLDG
Alarm/Trip Set Points:	HI=24'(225,600gal) LO=11.5'(108,100gal)
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	LOW
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Condensate Storage Tank (CST) Level B is the water level in the B CST. Two CSTs exist with a tank capacity of 230,000 gallons each. Makeup condensate water is provided through 3 electric pumps from the CST tanks to various plant systems. Each tank has suction line for Control Rod Drive, HPCI, Core Spray, RHR, and RCIC systems. At 7'(65,800gal) receive CST Low-Low Level alarm and condensate service pumps trip. At 2'8"(25,100gal) HPCI and RCIC transfer to Torus suction.

DATA POINT LIBRARY REFERENCE FILE

Date:	3/15/12
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	WIND SPEED
Point ID:	MET122FR
Plant Spec Point Desc.:	MT 43M A WIND SPEED 15MRUN
Generic/Cond Desc.:	WIND SPEED AT THE REACTOR SITE
Analog/Digital:	A
Engr Units/Dig States:	MPH
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	100.00
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	P
Number of Sensors:	1
How Processed:	15 MINUTE AVERAGE OF 5 SECOND VALUES
Sensor Location:	PRIMARY MET TOWER AT 43 METER HEIGHT
Alarm/Trip Set Points:	N/A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Data is collected every five seconds, averaged every minute, and stored in data files as 15-minute average.

DATA POINT LIBRARY REFERENCE FILE

Date:	3/15/12
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	WIND SPEED
Point ID:	MET123FR
Plant Spec Point Desc.:	MT 43M B WIND SPEED 15MRUN
Generic/Cond Desc.:	WIND SPEED AT THE REACTOR SITE
Analog/Digital:	A
Engr Units/Dig States:	MPH
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	100.00
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	P
Number of Sensors:	1
How Processed:	15 MINUTE AVERAGE OF 5 SECOND VALUES
Sensor Location:	PRIMARY MET TOWER AT 43 METER HEIGHT
Alarm/Trip Set Points:	N/A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Data is collected every five seconds, averaged every minute, and stored in data files as 15-minute average.

DATA POINT LIBRARY REFERENCE FILE

Date:	3/15/12
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	WIND SPEED
Point ID:	MET120FR
Plant Spec Point Desc.:	MT 100M A WIND SPEED 15MRUN
Generic/Cond Desc.:	WIND SPEED AT THE REACTOR SITE
Analog/Digital:	A
Engr Units/Dig States:	MPH
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	100.00
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	P
Number of Sensors:	1
How Processed:	15 MINUTE AVERAGE OF 5 SECOND VALUES
Sensor Location:	PRIMARY MET TOWER AT 100 METER HEIGHT
Alarm/Trip Set Points:	N/A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Data is collected every five seconds, averaged every minute, and stored in data files as 15-minute average.

DATA POINT LIBRARY REFERENCE FILE

Date:	3/15/12
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	WIND SPEED
Point ID:	MET121FR
Plant Spec Point Desc.:	MT 100M B WIND SPEED 15MRUN
Generic/Cond Desc.:	WIND SPEED AT THE REACTOR SITE
Analog/Digital:	A
Engr Units/Dig States:	MPH
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	100.00
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	P
Number of Sensors:	1
How Processed:	15 MINUTE AVERAGE OF 5 SECOND VALUES
Sensor Location:	PRIMARY MET TOWER AT 100 METER HEIGHT
Alarm/Trip Set Points:	N/A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg: N/A	
Unique System Desc.:	Data is collected every five seconds, averaged every minute, and stored in data files as 15-minute average.

DATA POINT LIBRARY REFERENCE FILE

Date:	3/15/12
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	WIND DIR
Point ID:	MET128FR
Plant Spec Point Desc.:	MT 43M A WIND DIR 15MRUN
Generic/Cond Desc.:	WIND DIRECTION AT THE REACTOR SITE
Analog/Digital:	A
Engr Units/Dig States:	DEGFR
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	540.00
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	P
Number of Sensors:	1
How Processed:	15 MINUTE AVERAGE OF 5 SECOND VALUES
Sensor Location:	PRIMARY MET TOWER AT 43 METER HEIGHT
Alarm/Trip Set Points:	N/A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Data is collected every five seconds, averaged every minute, and stored in data files as 15-minute average.

DATA POINT LIBRARY REFERENCE FILE

Date:	3/15/12
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	WIND DIR
Point ID:	MET129FR
Plant Spec Point Desc.:	MT 43M B WIND DIR 15MRUN
Generic/Cond Desc.:	WIND DIRECTION AT THE REACTOR SITE
Analog/Digital:	A
Engr Units/Dig States:	DEGFR
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	540.00
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	P
Number of Sensors:	1
How Processed:	15 MINUTE AVERAGE OF 5 SECOND VALUES
Sensor Location:	PRIMARY MET TOWER AT 43 METER HEIGHT
Alarm/Trip Set Points:	N/A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Data is collected every five seconds, averaged every minute, and stored in data files as 15-minute average.

DATA POINT LIBRARY REFERENCE FILE

Date:	3/15/12
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	WIND DIR
Point ID:	MET126FR
Plant Spec Point Desc.:	MT 100M A WIND DIR 15MRUN
Generic/Cond Desc.:	WIND DIRECTION AT THE REACTOR SITE
Analog/Digital:	A
Engr Units/Dig States:	DEGFR
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	540.00
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	P
Number of Sensors:	1
How Processed:	15 MINUTE AVERAGE OF 5 SECOND VALUES
Sensor Location:	PRIMARY MET TOWER AT 100 METER HEIGHT
Alarm/Trip Set Points:	N/A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Data is collected every five seconds, averaged every minute, and stored in data files as 15-minute average.

DATA POINT LIBRARY REFERENCE FILE

Date:	3/15/12
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	WIND DIR
Point ID:	MET127FR
Plant Spec Point Desc.:	MT 100M B WIND DIR 15MRUN
Generic/Cond Desc.:	WIND DIRECTION AT THE REACTOR SITE
Analog/Digital:	A
Engr Units/Dig States:	DEGFR
Engr Units Conversion:	N/A
Minimum Instr Range:	0
Maximum Instr Range:	540.00
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	P
Number of Sensors:	1
How Processed:	15 MINUTE AVERAGE OF 5 SECOND VALUES
Sensor Location:	PRIMARY MET TOWER AT 100 METER HEIGHT
Alarm/Trip Set Points:	N/A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Data is collected every five seconds, averaged every minute, and stored in data files as 15-minute average.

DATA POINT LIBRARY REFERENCE FILE

Date:	3/15/12
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	STAB CLASS
PointID:	MET140FR
Plant Spec Point Desc.:	MT 43M-10M A DELTA AIR T 15MRUN
Generic/Cond Desc.:	AIR STABILITY AT THE REACTOR SITE
Analog/Digital:	A
Engr Units/Dig States:	DEGF
Engr Units Conversion:	N/A
Minimum Instr Range:	-9.0
Maximum Instr Range:	9.0
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	PROC
Number of Sensors:	2
How Processed:	AVERAGED DIFFERENTIAL
Sensor Location:	PRIMARY MET AT 10 & 43 METER HEIGHT
Alarm/Trip Set Points:	N/A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Data is collected every five seconds, averaged every minute, and stored in data files as 15-minute average. This value represents the difference in temperature in degF/100ft.

DATA POINT LIBRARY REFERENCE FILE

Date:	3/15/12
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	STAB CLASS
PointID:	MET141FR
Plant Spec Point Desc.:	MT 43M-10M B DELTA AIR T 15MRUN
Generic/Cond Desc.:	AIR STABILITY AT THE REACTOR SITE
Analog/Digital:	A
Engr Units/Dig States:	DEGF
Engr Units Conversion:	N/A
Minimum Instr Range:	-9.0
Maximum Instr Range:	9.0
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	PROC
Number of Sensors:	2
How Processed:	AVERAGED DIFFERENTIAL
Sensor Location:	PRIMARY MET AT 10 & 43 METER HEIGHT
Alarm/Trip Set Points:	N/A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Data is collected every five seconds, averaged every minute, and stored in data files as 15-minute average. This value represents the difference in temperature in degF/100ft.

DATA POINT LIBRARY REFERENCE FILE

Date:	3/15/12
Reactor Unit:	1
Data Feeder:	S
NRC ERDS Parameter:	AB CLASS
PointID:	MET138FR
Plant Spec Point Desc.:	MT 100M-10M A DELTA AIR T 15MRUN
Generic/Cond Desc.:	AIR STABILITY AT THE REACTOR SITE
Analog/Digital:	A
Engr Units/Dig States:	DEGF
Engr Units Conversion:	N/A
Minimum Instr Range:	-9.0
Maximum Instr Range:	9.0
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	PROC
Number of Sensors:	2
How Processed:	AVERAGED DIFFERENTIAL
Sensor Location:	PRIMARY MET AT 10 & 100 METER HEIGHT
Alarm/Trip Set Points:	N/A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Data is collected every five seconds, averaged every minute, and stored in data files as 15-minute average. This value represents the difference in temperature in degF/100ft.

DATA POINT LIBRARY REFERENCE FILE

Date:	3/15/12
Reactor Unit:	MO1
Data Feeder:	PCS
NRC ERDS Parameter:	STAB CLASS
PointID:	MET139FR
Plant Spec Point Desc.:	MT 100M-10M B DELTA AIR T 15MRUN
Generic/Cond Desc.:	AIR STABILITY AT THE REACTOR SITE
Analog/Digital:	A
Engr Units/Dig States:	DEGF
Engr Units Conversion:	N/A
Minimum Instr Range:	-9.0
Maximum Instr Range:	9.0
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	PROC
Number of Sensors:	2
How Processed:	AVERAGED DIFFERENTIAL
Sensor Location:	PRIMARY MET AT 10 & 100 METER HEIGHT
Alarm/Trip Set Points:	N/A
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	HIGH & LOW SENSOR
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Data is collected every five seconds, averaged every minute, and stored in data files as 15-minute average. This value represents the difference in temperature in degF/100ft.

I. Contacts

Note: Please provide name, title, mailing address and phone number.

A. **Survey Coordinator (i.e. contact for later clarification of questionnaire answers):**

Russell E. Van Dell
Manager, Computer & Information Systems
Xcel Energy, Inc.
Monticello Nuclear Generating Plant
2807 West County Road 75
Monticello, MN 55362
(763) 295-1326

B. **Computer Hardware Specialist(s):**

Nai-Tai (Nelson) Fei Senior Engineer
Xcel Energy, Inc.
Monticello Nuclear Generating Plant
2807 West County Road 75
Monticello, MN 55362
(763) 271-5180

C. **Systems Software Specialist(s):**

Bob Awde
Principal Engineer
Xcel Energy, Inc.
Monticello Nuclear Generating Plant
2807 West County Road 75
Monticello, MN 55362
(763) 271-5103

D. **Application-level Software Specialist(s):**

Nai-Tai (Nelson) Fei
Senior Engineer
Xcel Energy, Inc.
Monticello Nuclear Generating Plant
2807 West County Road 75
Monticello, MN 55362
(763) 271-5180

E. **Telephone Systems Specialist(s):**

David Seestrom
Instrument Engineer
Xcel Energy, Inc.
Monticello Nuclear Generating Plant
2807 West County Road 75
Monticello, MN 55362
(763) 295-1376

II. Selection of Data Feeders

A. How many data feeders are there (six maximum)?

One - Process Computer System

B. Identify the selected data feeders and provide the following for each:

1. a short description of the categories of data points it will provide (e.g., met. rad. or plant data points, by unit) and

1.2. the rationale for selecting it if another system can also provide its categories of data points.

a) It is planned to provide both plant data points and meteorological information through the single feeder.

a)b) No other system is capable of providing requested information.

C. Which data feeder is the site time determining feeder? This should be the feeder which is providing the majority of the data points.

III. Data Feeder Information

Note: A new Section IV must be filled out for each feeder system selected.

General Questions

A. Identification of Data Feeder

1. What is the name in local parlance given to this data feeder (e.g., Emergency Response Information System)? Please give both the acronym and the words forming it.

   PCS - Process Computer System

2. Is this the site time determining feeder?

   Yes

3. How often will this feeder transmit an update set to the ERDS (in seconds)?

   60 Seconds

B. Hardware/Software Environment

1. Identify the manufacturer and model number of the data feeder hardware.

   Digital Equipment Corporation VAX-4000-108

2. Identify the operating system.

   VAX OpenVMS V7.1

3. What method of timekeeping is implemented on this feeder system (Daylight Savings, Standard, Greenwich)?

   Daylight Savings

4. In what time zone is this feeder located?
   Central Standard Time Zone

C. Data Communication Details

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

   Yes

2. Will this feeder transmit in ASCII or EBCDIC?

   ASCII

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

   Yes, 2400 bps can be used.

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

   Yes

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

      No, however the use of SUSPEND and RESUME to control the transmission of data works better as demonstrated in testing with Haliburton/NUS.

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

   Note Applicable.

6. Do any ports currently exist for the ERDS linkup?

   Yes

   a) If not, is it possible to add additional ports?

      Not Applicable.

b) If yes, will the port be used solely by the ERDS or shared with other non-emergency-time users? Give details.

Port will be dedicated for ERDS.

D. Data Feeder Physical Environment and Management

1. Where is the data feeder located in terms of the TSC, EOF, and control room?

Computer Room located in Plant Administrative Building adjacent to Plant Control Room.

2. Is the data feeder protected from loss of supply of electricity?

Yes, PCS is provided with UPS (batteries with inverter and diesel generator).

3. Is there a human operator for this data feeder?

Yes

a) If so, how many hours a day is the feeder attended?

It is planned to have the Shift Emergency Communicator (SEC) initiate the ERDS System per Emergency Implementing Procedures. An SEC is on duty 24 hours/day.