TOLEDO EDISON

A Centerior Energy Company

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United States Nuclear Regulatory Commission
Document Control Desk
Washington, D. C. 20555

Subject: Submittal of Emergency Response Data System (ERDS) Data Point Library Reference Files

Gentlemen:

Attached are the ERDS Data Point Library Reference Files for the Davis-Besse Nuclear Power Station.

Toledo Edison volunteered to participate in the ERDS program by letter dated June 29, 1989 (Serial Number 1678). At this time, the necessary software for transmitting ERDS information has been developed, has the capacity to transmit non-validated data, and is available for review and testing.

Toledo Edison will contact the NRC ERDS contractor directly in order to arrange a mutually acceptable schedule for preliminary testing of the system.

Should you have any questions or require any additional information, please contact Mr. R. W. Schrauder, Manager - Nuclear Licensing, at (419) 249-2366.

Very truly yours,

AVA/eld

Attachment

cc: P. M. Byron, DB-1 NRC Senior Resident Inspector, w/o attachment
A. B. Davis, Regional Administrator, NRC Region III, w/o attachment
E. L. Jordan, Analysis and Evaluation of Operational Data
T. V. Wambach, DB-1 NRC Senior Project Manager, w/o attachment
T. P. LaRosa, EI International, Inc.

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DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	H2 CONC
POINT ID:	A302
PLANT SPEC POINT DESC.:	Ctmt H2 Concentration
GENERIC/COND DESC.:	Containment Hydrogen Concentration
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	%
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	0
MAXIMUM INSTR RANGE:	10
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	S
NUMBER OF SENSORS:	1
HOW PROCESSED:	N/A
SENSOR LOCATIONS:	Aux Bldg
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:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: Air from 1 of 4 locations in containment is drawn through a thermal conductivity analyzer and analyzed for Hydrogen content. Local indications and alarms (0.6% to 1.0%), and control room indication, and alarms, are provided from the analyzer. The analyzer's measurement range is 0-10% Hydrogen. Two redundant vacuum pumps with standby autostart on low suction capability provide flow through the analyzer. Two completely redundant analyzers perform this function, however, this computer point receives input from the Channel 1 analyzer only.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	HP SI FLOW
POINT ID:	F461
PLANT SPEC POINT DESC.:	HP Inj 1-1 Flow
GENERIC/COND DESC.:	High Pressure Safety Injection Flow
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:	P
NUMBER OF SENSORS:	1
HOW PROCESSED:	DP converted to flow
SENSOR LOCATIONS:	Aux Bldg
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:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: There are two high pressure injection pumps, and each pump supplies two injection lines. There is one injection line per RCS coldleg (total of four). F461 displays flow to RCS coldleg 1-1 in GPM. Control room flow indication 1) allows for balancing of flow between injection lines for various operating configurations, such as only one HPI pump operating, and 2) provides input when HPI flow may be throttled.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	HP SI FLOW
POINT ID:	F464
PLANT SPEC POINT DESC.:	HP Inj 1-2 Flow
GENERIC/COND DESC.:	High Pressure Safety Injection Flow
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:	P
NUMBER OF SENSORS:	1
HOW PROCESSED:	DP converted to flow
SENSOR LOCATIONS:	Aux Bldg
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:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: There are two high pressure injection pumps, and each pump supplies two injection lines. There is one injection line per RCS coldleg (total of four). F464 displays flow to RCS coldleg 1-2 in GPM. Control room flow indication 1) allows for balancing of flow between injection lines for various operating configurations, such as only one HPI pump operating, and 2) provides input when HPI flow may be throttled.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	HP SI FLOW
POINT ID:	F467
PLANT SPEC POINT DESC.:	HP Inj 2-1 Flow
GENERIC/COND DESC.:	High Pressure Safety Injection Flow
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:	P
NUMBER OF SENSORS:	1
HOW PROCESSED:	DP converted to flow
SENSOR LOCATIONS:	Aux Bldg
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:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: There are two high pressure injection pumps, and each pump supplies two injection lines. There is one injection line per RCS coldleg (total of four). F467 displays flow to RCS coldleg 2-1 in GPM. Control room flow indication 1) allows for balancing of flow between injection lines for various operating configurations, such as only one HPI pump operating, and 2) provides input when HPI flow may be throttled.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	HP SI FLOW
POINT ID:	F470
PLANT SPEC POINT DESC.:	HP Inj 2-2 Flow
GENERIC/COND DESC.:	High Pressure Safety Injection Flow
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:	P
NUMBER OF SENSORS:	1
HOW PROCESSED:	DP converted to flow
SENSOR LOCATIONS:	Aux Bldg
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:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: There are two high pressure injection pumps, and each pump supplies two injection lines. There is one injection line per RCS coldleg (total of four). F470 displays flow to RCS coldleg 2-2 in GPM. Control room flow indication 1) allows for balancing of flow between injection lines for various operating configurations, such as only one HPI pump operating, and 2) provides input when HPI flow may be throttled.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	LP SI FLOW
POINT ID:	F592
PLANT SPEC POINT DESC.:	LP Inj 2 Flow
GENERIC/COND DESC.:	Low Pressure Safety Injection 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:	P
NUMBER OF SENSORS:	1
HOW PROCESSED:	DP converted to flow
SENSOR LOCATIONS:	Aux Bldg
ALARM/TRIP SET POINTS:	Low alarm at 2800 GPM, High alarm at 3750 GPM
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 TRANSMITTER:	N

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: Control room flow indication 1) allows for the balancing of flow between the injection lines if one train fails to start following an SFAS initiation, 2) provides input when to secure HPI flow, and 3) ensures minimum flow through the reactor vessel during boron concentration reductions. The low flow alarm is set at minimum flow during reactivity changes. The high flow alarm is set to prevent flow induced vibration problems in the DH coolers. Normal rated flow is 3000 GPM.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	LP SI FLOW
POINT ID:	F593
PLANT SPEC POINT DESC.:	LP Inj 1 Flow
GENERIC/COND DESC.:	Low Pressure Safety Injection 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:	P
NUMBER OF SENSORS:	1
HOW PROCESSED:	DP converted to flow
SENSOR LOCATIONS:	Aux Bldg
ALARM/TRIP SET POINTS:	Low alarm at 2800 GPM, High alarm at 3750 GPM
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 TRANSMITTER:	N

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: Control room flow indication 1) allows for the balancing of flow between the injection lines if one train fails to start following an SFAS initiation, 2) provides input when to secure HPI flow, and 3) ensures minimum flow through the reactor vessel during boron concentration reductions. The low flow alarm is set at minimum flow during reactivity changes. The high flow alarm is set to prevent flow induced vibration problems in the DH coolers. Normal rated flow is 3000 GPM.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	MN FD FL 1
POINT ID:	F674
PLANT SPEC POINT DESC.:	Main Feedwater Loop 1 Compensated Flow
GENERIC/COND DESC.:	Steam Gen 1 Main Feedwater Flow
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	KLB/hr
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	0
MAXIMUM INSTR RANGE:	7000
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	P
NUMBER OF SENSORS:	2
HOW PROCESSED:	DP converted to flow, temperature compensated
SENSOR LOCATIONS:	Aux Bldg - On 18" Loop 1 Feedwater Pipe
ALARM/TRIP SET POINTS:	None
NI DETECTOR POWER SUPPLY CUT-OFF POWER LEVEL:	N/A
NI DETECTOR POWER SUPPLY TURN-ON POWER LEVEL:	N/A
INSTRUMENT FAILURE MODE:	Medium
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	Y

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: There are two turbine driven Main Feedwater Pumps. The sensor measures total flow in the main feed header for Steam Generator 1, downstream of the feedwater control valves. At full power, this flow is about 5700 KLB/hr.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	MN FD FL 2
POINT ID:	F679
PLANT SPEC POINT DESC.:	Main Feedwater Loop 2 Compensated Flow
GENERIC/COND DESC.:	Steam Gen 2 Main Feedwater Flow
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	KLB/hr
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	0
MAXIMUM INSTR RANGE:	7000
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	P
NUMBER OF SENSORS:	2
HOW PROCESSED:	DP converted to flow, temperature compensated
SENSOR LOCATIONS:	Turbine Bldg - On 18" Loop 2 Feedwater Pipe
ALARM/TRIP SET POINTS:	None
NI DETECTOR POWER SUPPLY CUT-OFF POWER LEVEL:	N/A
NI DETECTOR POWER SUPPLY TURN-ON POWER LEVEL:	N/A
INSTRUMENT FAILURE MODE:	Medium
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	Y

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: There are two turbine driven Main Feedwater Pumps. This sensor measures total flow to Steam Generator 2 in the main feed header upstream of the feedwater control valves. At full power, this flow is about 5700 KLB/hr.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	CORE FLOW
POINT ID:	F727
PLANT SPEC POINT DESC.:	RC Loop 1 Hotleg Flow
GENERIC/COND DESC.:	Total Reactor Coolant Flow
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	MLB/hr
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	0
MAXIMUM INSTR RANGE:	60
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	P
NUMBER OF SENSORS:	2
HOW PROCESSED:	DP converted to flow, temperature compensated
SENSOR LOCATIONS:	CTMT - Mounted on D-Ring wall
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:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	Y

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: Differential pressure signals from two DP cells, one in each hot leg loop, are transmitted to each RPS channel. One loop 1 flow signal is selected from either RPS channel 1 or 2 and is fed, via an output selection panel (located in RPS channel 2), to the NNI cabinets. In the NNI cabinets, the flow is processed by a square root extractor and temperature compensated with a hot leg temperature signal. Transmitter calibrated range is 0-733.8 inches, corresponding to 0-80 million pounds per hour. Other outputs include control room indicators and signals to ICS feedwater control.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	CORE FLOW
POINT ID:	F732
PLANT SPEC POINT DESC.:	RC Loop 2 Hotleg Flow
GENERIC/COND DESC.:	Total Reactor Coolant Flow
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	MLB/hr
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	0
MAXIMUM INSTR RANGE:	80
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	P
NUMBER OF SENSORS:	2
HCW PROCESSED:	DP converted to flow, temperature compensated
SENSOR LOCATIONS:	CTMT - Mounted on D-Ring wall
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:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	Y

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: Differential pressure signals from two DP cells, one in each hot leg loop, are sent to each RPS channel. One loop 2 flow signal is selected from either RPS channel 1 or 2 and is fed, via an output selection panel (located in RPS channel 2), to the NNI cabinets. In the NNI cabinets, the DP flow is processed by a square root extractor and temperature compensated with a hot leg temperature signal. The flow for F732 and F727 are normally selected from the same RPS channel. Transmitter calibrated range is 0-717 inches, corresponding to 0-60 million pounds per hour. Other outputs include control room indicators and signals to ICS feedwater control.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	RCS CHG/MU
POINT ID:	F740
PLANT SPEC POINT DESC.:	RC MU Flow High Range
GENERIC/COND DESC.:	Primary System Charging or Make-up Flow
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:	P
NUMBER OF SENSORS:	1
HOW PROCESSED:	DP converted to flow
SENSOR LOCATIONS:	Aux Bldg
ALARM/TRIP SET POINTS:	High alarm at 140 GPM
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 TRANSMITTER:	N

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: This computer point provides Reactor Coolant System (RCS) make-up flow rate going to RCS cold leg loop 2-1. There is also input to control room annunciation for high RC make-up flow (set at 140 GPM).

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	AX FD FL 1
POINT ID:	F874
PLANT SPEC POINT DESC.:	SG 1 AFW Flow
GENERIC/COND DESC.:	Steam Gen 1 Auxiliary FW Flow
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	GPM
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	0
MAXIMUM INSTR RANGE:	1000
REFERENCE POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	P
NUMBER OF SENSORS:	1
HOW PROCESSED:	DP converted to flow
SENSOR LOCATIONS:	Aux Bldg - On AFW Supply Line to SG 1
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:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: This computer point provides Auxiliary Feedwater Flow to Steam Generator 1 indication. This flow instrument taps in downstream of the Motor Driven Feedwater Pump (MDFP) tie in, and the AFW cross-connect piping. Therefore, this indication represents the total flow to SG1 from any of three sources, AFP 1, AFP 2, or the MDFP.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	AX FD FL 2
POINT ID:	F875
PLANT SPEC POINT DESC.:	SG 2 AFW Flow
GENERIC/COND DESC.:	Steam Gen 2 Auxiliary FW Flow
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	GPM
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	0
MAXIMUM INSTR RANGE:	1000
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	P
NUMBER OF SENSORS:	1
HOW PROCESSED:	DP converted to flow
SENSOR LOCATIONS:	Aux Bldg - On AFW Supply Line to SG 2
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:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: This computer point provides Auxiliary Feedwater Flow to Steam Generator 2 indication. This flow instrument taps in downstream of the Motor Driven Feedwater Pump (MDFP) tie in, and the AFW cross-connect piping. Therefore, this indication represents the total flow to SG2 from any of three sources, AFP1, AFP2, or the MDFP.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	MN FD FL 1
POINT ID:	F878
PLANT SPEC POINT DESC.:	Main Feedwater Loop 1 Startup Flow
GENERIC/COND DESC.:	Steam Gen 1 Main Feedwater Flow
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	KLB/hr
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	0
MAXIMUM INSTR RANGE:	1500
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	P
NUMBER OF SENSORS:	1
HOW PROCESSED:	DP converted to flow, temperature compensated
SENSOR LOCATIONS:	Turbine Bldg - On 6" Startup Feedwater Loop 1 Pipe
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:	Medium
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	Y

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: There are two parallel automatic feedwater control valves. The Startup Feedwater Control valve controls flow until about 20% power. At higher powers, the Startup Feedwater Control valve is fully open. Flow is controlled by the Main Feedwater Control valve. This sensor is located just upstream of the Startup Feedwater Control valve 1, and measures flow only through this valve.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	MN FD FL 2
POINT ID:	F879
PLANT SPEC POINT DESC.:	Main Feedwater Loop 2 Startup Flow
GENERIC/COND DESC.:	Steam Gen 2 Main Feedwater Flow
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	KLB/hr
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	0
MAXIMUM INSTR RANGE:	1500
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	P
NUMBER OF SENSORS:	1
HOW PROCESSED:	Dp converted to flow, temperature compensated
SENSOR LOCATIONS:	Turbine Bldg - On 6" Startup Feedwater Loop 2 Pipe
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:	Medium
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	Y

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: There are two parallel automatic feedwater control valves. The Startup Feedwater Control valve controls flow until about 20% power. At higher powers, the Startup Feedwater Control valve is fully open. Flow is controlled by the Main Feedwater Control valve. This sensor is located just upstream of the Startup Feedwater Control valve 2, and measures flow only through this valve.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	BWST LEVEL
POINT ID:	L062
PLANT SPEC POINT DESC.:	BWST Lvl SFAS Ch 1
GENERIC/COND DESC.:	Borated Water Storage Tank Level
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	FT
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	0
MAXIMUM INSTR RANGE:	50
ZERO POINT REFERENCE:	TNKBOT
REFERENCE POINT NOTES:	0' is 0'7" above tank bottom
PROC OR SENS:	P
NUMBER OF SENSORS:	1
HOW PROCESSED:	DP converted to level
SENSOR LOCATIONS:	Outside, at base of BWST
ALARM/TRIP SET POINTS:	Low level alarm at 38.5', SFAS level 5 actuation at 8'
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 TRANSMITTER:	N

LEVEL REFERENCE LEG: Dry

UNIQUE SYSTEM DESC.: This indication is used 1) to provide BWST level indication to the control room, and 2) as input to the Safety Features Actuation System trip bistable. This bistable provides a signal to output logic which provides control room annunciation of a permissive signal, which permits the operator to shift the low pressure injection water source from the BWST to the Emergency Sump. Four redundant transmitters are available, however, this computer point receives a signal from SFAS Channel 1 only. A BWST low level annunciator is provided by Ch 1 and Ch 2, at 38.5'. Tech Spec minimum level is 37.4'. Normal level is approximately 41'.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	CTMNT SMP NR
POINT ID:	L318
PLANT SPEC POINT DESC.:	Ctmt Normal Sump Level
GENERIC/COND DESC.:	Containment Sump Narrow Range Level
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	FT
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	0
MAXIMUM INSTR RANGE:	4
ZERO POINT REFERENCE:	TNKBOT
REFERENCE POINT NOTES:	CTMT - at 538'
PROC OR SENS:	S
NUMBER OF SENSORS:	1
HOW PROCESSED:	See description
SENSOR LOCATIONS:	CTMT - In Emergency Sump
ALARM/TRIP SET POINTS:	High alarm at 4.0', Low alarm at 0'
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 TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: Narrow range containment sump level is monitored by float type level transmitters mounted in the sump. The level transmitters have a calibrated range of 0' to 4'. The normal sump contains 369.1 gal/ft, and is 31" deep.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	CTMNT SMP WR
POINT ID:	L321
PLANT SPEC POINT DESC.:	Ctmt WR Level
GENERIC/COND DESC.:	Containment Sump Wide Range Level
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	FT
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	538
MAXIMUM INSTR RANGE:	593
ZERO POINT REFERENCE:	TNKBOT
REFERENCE POINT NOTES:	Level given in elevation above sea level. 538' is the bottom of RX vessel cavity.
PROC OR SENS:	S
NUMBER OF SENSORS:	1
HOW PROCESSED:	DP converted to level
SENSOR LOCATIONS:	CTMT - In Normal Sump
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:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N

LEVEL REFERENCE LEG: Dry

UNIQUE SYSTEM DESC.: The purpose of the wide range sump level is to provide indication of the water level in containment following a Loss of Coolant Accident. The level instrument is able to measure levels higher than the containment flood level, which is at 572'2", and corresponds to approximately 600,000 gallons. The level sensors are absolute pressure transmitters, which have a scale range of 0-228 psig. The pressure transmitters are mounted at the bottom of the normal sump.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	REAC VES LEV
POINT ID:	L722
PLANT SPEC POINT DESC.:	HLLMS Loop 1 Hotleg Level
GENERIC/COND DESC.:	Reactor Vessel Water Level
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	IN
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	0
MAXIMUM INSTR RANGE:	918
ZERO POINT REFERENCE:	TAF
REFERENCE POINT NOTES:	Actual ZPR is at Reactor Outlet Plenum
PROC OR SENS:	P
NUMBER OF SENSORS:	4
HOW PROCESSED:	See system description
SENSOR LOCATIONS:	CTMT
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:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	Y

LEVEL REFERENCE LEG: Wet

UNIQUE SYSTEM DESC.: The differential pressure between the top of Loop 1 hotleg (Elevation 647'6") and the Loop 1 Reactor Outlet (Elevation 571'), Hotleg Level Reference Leg Temperature, RCS Pressure, and RCS Temperature are used in a computer algorithm to determine compensated hotleg level. A value of -9999 is displayed when the RCPs are running. The algorithm is only valid when all RCPs are off.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	REAC VES LEV
POINT ID:	L723
PLANT SPEC POINT DESC.:	HLLMS Loop 2 Hotleg Level
GENERIC/COND DESC.:	Reactor Vessel Water Level
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	IN
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	0
MAXIMUM INSTR RANGE:	918
ZERO POINT REFERENCE:	TAF
REFERENCE POINT NOTES:	Actual ZPR is at Reactor Outlet Plenum
PROC OR SENS:	P
NUMBER OF SENSORS:	4
HOW PROCESSED:	See system description
SENSOR LOCATIONS:	CTMT
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:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	Y

LEVEL REFERENCE LEG: Wet

UNIQUE SYSTEM DESC.: The differential pressure between the top of Loop 2 hotleg (Elevation 647'6") and the Loop 1 Reactor Outlet (Elevation 571'), Hot-leg Level Reference Leg Temperature, RCS Pressure, and RCS Temperature are used in a computer algorithm to determine compensated hotleg level. A value of -9999 is displayed when the RCPs are running. The algorithm is only valid when all RCPs are off.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	PRZR LEVEL
POINT ID:	L768
PLANT SPEC POINT DESC.:	Pressurizer Compensated Level
GENERIC/COND DESC.:	Primary System Pressurizer Level
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	IN
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	0
MAXIMUM INSTR RANGE:	320
ZERO POINT REFERENCE:	Complex
REFERENCE POINT NOTES:	Hemispherical portion
PROC OR SENS:	P
NUMBER OF SENSORS:	5
HOW PROCESSED:	See system description
SENSOR LOCATIONS:	CTMT - On Pressurizer
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:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	Y

LEVEL REFERENCE LEG: Wet

UNIQUE SYSTEM DESC.: This computer point indicates pressurizer level as measured by a selected level transmitter that is temperature compensated. Three level transmitters, and two temperature transmitters are selectable from the control room to accomplish this function.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	SG LEVEL 1
POINT ID:	L883
PLANT SPEC POINT DESC.:	SG 1 Startup Range Level
GENERIC/COND DESC.:	Steam Generator 1 Water Level
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	IN
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	0
MAXIMUM INSTR RANGE:	250
ZERO POINT REFERENCE:	TUBSHT
REFERENCE POINT NOTES:	0" = 6" above lower tube sheet
PROC OR SENS:	P
NUMBER OF SENSORS:	1
HOW PROCESSED:	DP converted to level
SENSOR LOCATIONS:	CTMT - Outside of D-Ring
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
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N

LEVEL REFERENCE LEG: Wet

UNIQUE SYSTEM DESC.: This level signal is used for indication and is also sent to the ICS where it controls feedwater flow on startups and post-trip to maintain the Once Through Steam Generator (OTSG) at, or above, Low Level Limits (40"). On Steam and Feedwater Rupture Control System (SFRCS) actuations, the OTSG levels are maintained at 49" (55", if being fed by the opposite side Aux Feedwater Pump). These are also the setpoints for natural circulation. On a Safety Features Actuation System Level 2 actuation, the OTSG levels are increased to 124" and 130" respectively.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	SG LEVEL 2
POINT ID:	L8$3
PLANT SPEC POINT DESC.:	SG 2 Startup Range Level
GENERIC/COND DESC.:	Steam Generator 2 Water Level
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	IN
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	0
MAXIMUM INSTR RANGE:	250
ZERO POINT REFERENCE:	TUBSHT
REFERENCE POINT NOTES:	0" = 6" above lower tube sheet
PROC OR SENS:	P
NUMBER OF SENSORS:	1
HOW PROCESSED:	DP converted to level
SENSOR LOCATIONS:	CTMT - Outside D-Ring
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
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N

LEVEL REFERENCE LEG: Wet

UNIQUE SYSTEM DESC.: This level signal is used for indication and is also sent to the ICS where it controls feedwater flow in startups and post trip to maintain the Once Through Steam Generator (OTSG) at, or above, Low Level Limits (40"). On Steam and Feedwater Rupture Control System (SFRCS) actuations, the OTSG levels are maintained at 49" (55", if being fed by the opposite side Aux Feedwater Pump). These are also the setpoints for natural circulation. On a Safety Features Actuation System Level 2 actuation, the OTSG levels are increased to 124" and 130" respectively.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	WIND DIR
POINT ID:	M003
PLANT SPEC POINT DESC.:	10 Meter Wind Direction
GENERIC/COND DESC.:	Wind Direction at Reactor Site
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	DEG
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	0
MAXIMUM INSTR RANGE:	360
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	S
NUMBER OF SENSORS:	1
HOW PROCESSED:	15 Min Average
SENSOR LOCATIONS:	Met Tower - 10 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:	Low, but computer causes output to read 999.
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: A fifteen minute average is taken from the meteorological data processing system.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	WIND SPEED
POINT ID:	M006
PLANT SPEC POINT DESC.:	10 Meter Wind Speed
GENERIC/COND DESC.:	Wind Speed at Reactor Site
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	MPH
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	0
MAXIMUM INSTR RANGE:	100
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	S
NUMBER OF SENSORS:	1
HOW PROCESSED:	15 Min. Average
SENSOR LOCATIONS:	Met Tower - 10 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:	Low, but computer causes output to read 999.
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: A fifteen minute average is taken from the meteorological data processing system.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	STAB CLASS
POINT ID:	M011
PLANT SPEC POINT DESC.:	75 - 10 Meter
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:	-4
MAXIMUM INSTR RANGE:	+8
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	P
NUMBER OF SENSORS:	2
HOW PROCESSED:	Difference between 75 and 10 meter temperatures
SENSOR LOCATIONS:	75m and 10m above ground level
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:	Low, but computer causes output to read 999.
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: A fifteen minute average is taken from the meteorological data processing system. The 75 meter sensor is 244'4" above ground level, and the 10 meter sensor is 35' above ground level.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	CTMNT PRESS
POINT ID:	P305
PLANT SPEC POINT DESC.:	Ctmt WR Pressure
GENERIC/COND DESC.:	Containment Pressure
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	PSIA
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	0
MAXIMUM INSTR RANGE:	200
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	S
NUMBER OF SENSORS:	1
HOW PROCESSED:	N/A
SENSOR LOCATIONS:	Aux Bldg
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:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: Sensor provides indication of containment atmospheric pressure for post accident monitoring display in the control room in units of PSIA. Calibrated range is 0-200 PSIA. The transmitter is located in the auxiliary building.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	RCS PRESSURE
POINT ID:	P726
PLANT SPEC POINT DESC.:	RC Loop 1 Hotleg Extended
GENERIC/COND DESC.:	Reactor Coolant System Pressure
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	PSIG
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	0
MAXIMUM INSTR RANGE:	3000
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	S
NUMBER OF SENSORS:	1
HOW PROCESSED:	N/A
SENSOR LOCATIONS:	CTMT - On Loop 1 Hotleg
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:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: This computer point indicates RCS pressure as measured on the Loop 1 Hotleg.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	RCS PRESSURE
POINT ID:	P734
PLANT SPEC POINT DESC.:	RC Loop 2 Hotleg Extended
GENERIC/COND DESC.:	Reactor Coolant System Pressure
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	PSIG
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	0
MAXIMUM INSTR RANGE:	3000
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	S
NUMBER OF SENSORS:	1
HOW PROCESSED:	N/A
SENSOR LOCATIONS:	CTMT - On Loop 2 Hotleg
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:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: This computer point indicates RCS pressure as measured on the Loop 2 Hotleg.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	SC PRESS 1
POINT ID:	P932
PLANT SPEC POINT DESC.:	SG 1 Outlet Steam Pressure
GENERIC/COND DESC.:	Steam Generator 1 Pressure
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	PSIG
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	0
MAXIMUM INSTR RANGE:	1200
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	S
NUMBER OF SENSORS:	1
HOW PROCESSED:	N/A
SENSOR LOCATIONS:	CTMT - On Main Steam Header 1 upstream of MSIV 1
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:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: This signal is used for control room indication and control in the Integrated Control System (ICS). It is used in the ICS to control Atmospheric Vent Valve 1, and the Loop 1 Turbine Bypass Valves when the condenser is available.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	SG PRESS 2
POINT ID:	P936
PLANT SPEC POINT DESC.:	SG 2 Outlet Steam Pressure
GENERIC/COND DESC.:	Steam Generator 2 Pressure
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	PSIG
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	0
MAXIMUM INSTR RANGE:	1200
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	S
NUMBER OF SENSORS:	1
HOW PROCESSED:	N/A
SENSOR LOCATIONS:	CTMT - On Main Steam Header 2 upstream of MSIV 2
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:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: This signal is used for control room indication and control in the Integrated Control System (ICS). It is used in the ICS after a turbine trip to control Atmospheric Vent Valve 2, and the Loop 2 Turbine Bypass Valves when the condenser is available.

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DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	CTMNT RAD
POINT ID:	R299
PLANT SPEC POINT DESC.:	Ctmt Wide Range Radiation
GENERIC/COND DESC.:	Radiation Level in Containment
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	R/hr
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	0
MAXIMUM INSTR RANGE:	10^8
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	S
NUMBER OF SENSORS:	1
HOW PROCESSED:	N/A
SENSOR LOCATIONS:	CTMT - Top of D-Ring
ALARM/TRIP SET POINTS:	Alert alarm at 10 R/hr, High alarm at 50 R/hr
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 TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: The detector used for this computer point is a RP-23 Ionization Chamber. The detector has a measurement range of 1 to 10^8 R/hr. During normal power operation, the computer point value is approximately 1.0.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	RCS LTDN RAD
POINT ID:	R786
PLANT SPEC POINT DESC.:	RCS Letdown Activity
GENERIC/COND DESC.:	Rad Level of the RCS Letdown Line
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	log CPM
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	1
MAXIMUM INSTR RANGE:	6
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	S
NUMBER OF SENSORS:	1
HOW PROCESSED:	N/A
SENSOR LOCATIONS:	Aux Bldg - On Letdown Pipe
ALARM/TRIP SET POINTS:	Alert alarm at 6×10^5, High alarm at 1×10^6.
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 TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: The detector used for this computer point is a gamma detector, snow plow type sampler, which fits around the 3 inch letdown line. The letdown line is manually isolated after Reactor trips and automatically isolated on a Safety Features Actuation System Level 2 actuation.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	MAIN SL 1
POINT ID:	R787
PLANT SPEC POINT DESC.:	Main Steam Line 1 Radiation
GENERIC/COND DESC.:	Stm Gen 1 Steam Line Rad Level
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	log CPM
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	1
MAXIMUM INSTR RANGE:	6
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	S
NUMBER OF SENSORS:	1
HOW PROCESSED:	N/A
SENSOR LOCATIONS:	Turbine Bldg - On Main Steam Line 1
ALARM/TRIP SET POINTS:	Alert alarm at 800 cpm, High alarm at 1000 cpm
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 TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: The detector used for this signal is a gamma detector, snow plow type sampler, which fits around the 36 inch Main Steam Line 1. Above 2% power, the detector is operated in the analyze mode to measure N^{16} activity. Below 2% power, the detector is switched to the gross mode.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	MAIN SL 2
POINT ID:	R788
PLANT SPEC POINT DESC.:	Main Steam Line 2 Radiation
GENERIC/COND DESC.:	Stm Gen 2 Steam Line Rad Level
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	log CPM
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	1
MAXIMUM INSTR RANGE:	6
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	S
NUMBER OF SENSORS:	1
HOW PROCESSED:	N/A
SENSOR LOCATIONS:	Turbine Bldg - On Main Steam Line 2
ALARM/TRIP SET POINTS:	Alert alarm at 800 cpm, High alarm at 1000 cpm
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 TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: The detector used for this signal is a gamma detector, snow plow type sampler, which fits around the 36 inch Main Steam Line 2. Above 2% power, the detector is operated in the analyze mode to measure N^{16} activity. Below 2% power, the detector is switched to the gross mode.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	NI POWER RNG
POINT ID:	R790
PLANT SPEC POINT DESC.:	RPS Auctioneered Average Power
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:	4
HOW PROCESSED:	High Auctioneered - See description
SENSOR LOCATIONS:	CTMT - In Nuclear Instrument Tube
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:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: Power range signal from the four power range NIs is sent to NNI cabinets where CH 1 and 2 are high auctioneered and CH 3 and 4 are high auctioneered. The two signals are then sent to ICS cabinets where they are again high auctioneered. The resulting signal is used by the Integrated Control System (ICS) to direct control rod motion. The four power range NIs are uncompensated ion detectors.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	NI SOURC RNG
POINT ID:	R796
PLANT SPEC POINT DESC.:	RPS Ch1 SR NI2 Flux
GENERIC/COND DESC.:	Nuclear Instruments, Source Range
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	log CPS
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	-1
MAXIMUM INSTR RANGE:	6
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	S
NUMBER OF SENSORS:	1
HOW PROCESSED:	See description
SENSOR LOCATIONS:	CTMT - In Nuclear Instrumentation Tube
ALARM/TRIP SET POINTS:	N/A
NI DETECTOR POWER SUPPLY CUT-OFF POWER LEVEL:	1×10^{-9} amps increasing on Intermediate Range. 10% power increasing on Power Range (backup).
NI DETECTOR POWER SUPPLY TURN-ON POWER LEVEL:	5×10^{-10} amps decreasing on Intermediate Range.
INSTRUMENT FAILURE MODE:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: BF3 proportional counter measures neutron counts from 0.1 to 10^6 CPS. Preamplifier shapes and amplifies the signal and provides an output to Count Rate Amp, which outputs 0-10 VDC signal proportional to log of input pulses. A rate of change amp provides signal to a bistable to inhibit rod withdrawal if rate of change exceeds 2 DPM, and provides control room indication. The 2 SR instruments are located 180° (cross core) from each other.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	NI SOURC RNG
POINT ID:	R805
PLANT SPEC POINT DESC.:	RPS Ch2 SR NI1 Flux
GENERIC/COND DESC.:	Nuclear Instruments, Source Range
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	log CPS
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	-1
MAXIMUM INSTR RANGE:	6
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	S
NUMBER OF SENSORS:	1
HOW PROCESSED:	N/A
SENSOR LOCATIONS:	CTMT - In Nuclear Instrumentation Tube
ALARM/TRIP SET POINTS:	N/A
NI DETECTOR POWER SUPPLY CUT-OFF POWER LEVEL:	1×10^{-9} amps increasing on Intermediate Range. 10% power increasing on Power Range (backup).
NI DETECTOR POWER SUPPLY TURN-ON POWER LEVEL:	5×10^{-10} amps decreasing on Intermediate Range.
INSTRUMENT FAILURE MODE:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: BF 3 proportional counter measures neutron counts from 0.1 to 10^6 CPS. Preamplifier shapes and amplifies the signal and provides an output to Count Rate Amp, which outputs 0-10 VDC signal proportional to log of input pulses. A rate of change amp provides signal to a bistable to inhibit rod withdrawal if rate of change exceeds 2 DPM, and provides control room indication. The 2 SR instruments are located 180° (cross core) from each other.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	NI INTER RNG
POINT ID:	R812
PLANT SPEC POINT DESC.:	RPS Ch3 IR NI4 Flux
GENERIC/COND DESC.:	Nuclear Instruments, Intermediate Range
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	log AMPS
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	-11
MAXIMUM INSTR RANGE:	-3
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	S
NUMBER OF SENSORS:	1
HOW PROCESSED:	N/A
SENSOR LOCATIONS:	CTMT - In Nuclear Instrumentation Tube
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:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: Gamma compensated ion chamber detector provides neutron flux measurement in the range of 10^{-11} to 10^{-3} amps. Log amplifier converts this signal into a corresponding 0-10 volt signal, which is applied to a rate of change amplifier and control room meter and recorder. The rate of change amplifier provides a signal to a control room startup rate indicator and a bistable module to inhibit rod withdrawal if the rate of power change exceeds 3 DPM. The 2 IR detectors are located 180° (cross core) from each other. When both NI 4 and NI 3 exceed 1×10^{-9} amps, a signal is developed to cutout high voltage to the source range instruments. When NI 4 or NI 3 is below 5×10^{-9}, high voltage is applied.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	NI INTER RNG
POINT ID:	X818
PLANT SPEC POINT DESC.:	RPS Ch4 IR NI3 Flux
GENERIC/COND DESC.:	Nuclear Instruments, Intermediate Range
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	log AMPS
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	-11
MAXIMUM INSTR RANGE:	-3
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	S
NUMBER OF SENSORS:	1
HOW PROCESSED:	N/A
SENSOR LOCATIONS:	CTMT - In Nuclear Instrumentation Tube
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:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: Gamma compensated ion chamber detector provides neutron flux measurement in the range of 10^{-11} to 10^{-3} amps. Log amplifier converts this signal into a corresponding 0-10 volt signal, which is applied to a rate of change amplifier and control room meter and recorder. The rate of change amplifier provides a signal to a control room startup rate indicator and a bistable module to inhibit rod withdrawal if rate of power change exceeds 3 DPM. The 2 IR detectors are located 180° (cross core) from each other.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	EFF GAS RAD
POINT ID:	R844
PLANT SPEC POINT DESC.:	Unit Vent Normal Range - Particulate
GENERIC/COND DESC.:	Radioactivity of Released Gases
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	log uCi/cc
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	-10
MAXIMUM INSTR RANGE:	-2
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	P
NUMBER OF SENSORS:	2
HOW PROCESSED:	See systems description
SENSOR LOCATIONS:	Turbine Bldg. - 623 level
ALARM/TRIP SET POINTS:	Alert alarm at 2.0×10^{-9} uCi/cc, High alarm at 2.0×10^{-8} uCi/cc
NI DETECTOR POWER SUPPLY CUT-OFF POWER LEVEL:	N/A
NI DETECTOR POWER SUPPLY TURN-ON POWER LEVEL:	N/A
INSTRUMENT FAILURE MODE:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: The particulate channel is a Beta Scintillation detector calibrated to operate in a gross counting mode to detect particulate activity. The detector responds to activity deposited on a fixed paper filter. An algorithm calculates the actual activity concentration from the change in filter activity and the amount of flow which has passed through the filter.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	EFF GAS RAD
POINT ID:	R845
PLANT SPEC POINT DESC.:	Unit Vent Normal Range - Iodine
GENERIC/COND DESC.:	Radioactivity of Released Gases
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	log uCi/cc
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	-10
MAXIMUM INSTR RANGE:	-2
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	P
NUMBER OF SENSORS:	2
HOW PROCESSED:	See description
SENSOR LOCATIONS:	Turbine Bldg. - 623 level
ALARM/TRIP SET POINTS:	Alert alarm at 1.0×10^{-9} uCi/cc, High alarm at 1.0×10^{-8} uCi/cc
NI DETECTOR POWER SUPPLY CUT-OFF POWER LEVEL:	N/A
NI DETECTOR POWER SUPPLY TURN-ON POWER LEVEL:	N/A
INSTRUMENT FAILURE MODE:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: The Iodine channel is calibrated to operate in the analyze mode to detect I-131 activity. The gamma scintillation detector responds to Iodine activity absorbed in a charcoal cartridge. An algorithm calculates the actual activity concentration from the change in cartridge activity and the amount of flow which has passed through the cartridge.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	EFF GAS RAD
POINT ID:	R846
PLANT SPEC POINT DESC.:	Unit Vent Normal Range - Xenon
GENERIC/COND DESC.:	Radioactivity of Released Gases
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	log uCi/cc
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	-7
MAXIMUM IMSTR RANGE:	-1.3
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	P
NUMBER OF SENSORS:	2
HOW PROCESSED:	See description
SENSOR LOCATIONS:	Turbine Bldg. - 623 level
ALARM/TRIP SET POINTS:	Alert alarm at 1.0×10^{-4} uCi/cc; High alarm at 1.0×10^{-3} uCi/cc
NI DETECTOR POWER SUPPLY CUT-OFF POWER LEVEL:	N/A
NI DETECTOR POWER SUPPLY TURN-ON POWER LEVEL:	N/A
INSTRUMENT FAILURE MODE:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: The unit vent Beta scintillation detector covers the following range: 1.0×10^{-7} to 5.0×10^{-2} uCi/cc for Xenon 133. The normal range monitor will transfer its sample to the high range monitor at 3.0×10^{-2} uCi/cc. The normal range monitor is fully bypassed at 5.0×10^{-2} uCi/cc. An algorithm calculates the actual activity from the change in activity and the amount of flow which has passed through the chamber.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	EFF GAS RAD
POINT ID:	R847
PLANT SPEC POINT DESC.:	Unit Vent Accident Range - Xenon
GENERIC/COND DESC.:	Radioactivity of Released Gases
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	log uCi/cc
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	-3
MAXIMUM INSTR RANGE:	5
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	P
NUMBER OF SENSORS:	2
HOW PROCESSED:	See description
SENSOR LOCATIONS:	Turbine Bldg. - 623 level
ALARM/TRIP SET POINTS:	Alert alarm at 1.0×10^{-2} uCi/cc, High alarm at 1.0×10^{-1} uCi/cc.
NI DETECTOR POWER SUPPLY CUT-OFF POWER LEVEL:	N/A
NI DETECTOR POWER SUPPLY TURN-ON POWER LEVEL:	N/A
INSTRUMENT FAILURE MODE:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: The accident range unit is normally in standby, therefore, this computer point will normally read -3 log uCi/cc. The accident range monitor will commence sampling when the normal range noble gas (Xenon) activity exceeds 3×10^{-2} uCi/cc.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	TEMP CORE EX
POINT ID:	One of 16 listed in system description
PLANT SPEC POINT DESC.:	Associated description for 1 of 16 computer points from above
GENERIC/COND DESC.:	Highest temperature at core exit
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	DEGF
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	0
MAXIMUM INSTR RANGE:	2300
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	P
NUMBER OF SENSORS:	16
HOW PROCESSED:	Highest
SENSOR LOCATIONS:	Incore thermocouples are located at top of fuel.
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:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: The Validyne computer scans the 16 available Incore Thermocouple values and displays the highest value from this set. The computer point's normal ID and description will be displayed with the value. The 16 computer points, and their associated descriptions, which have been abbreviated to show only the thermocouples core location, are: 1) T514 (F-3), 2) T515 (L-3), 3) T520 (G-5), 4) T522 (K-5), 5) T524 (C-6), 6) T527 (0-6), 7) T530 (E-7), 8) T532 (M-7), 9) T539 (E-9), 10) T542 (M-9), 11) T544 (C-10), 12) T547 (0-10), 13) T550 (G-11), 14) T551 (K-11), 15) T557 (F-13), and 16) T560 (L-13).

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	SUB MARGIN
POINT ID:	T751
PLANT SPEC POINT DESC.:	Reactor Coolant Hotleg, Subcooling Margin
GENERIC/COND DESC.:	Saturation Temperature - Highest CET
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	DEGF
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	-1024
MAXIMUM INSTR RANGE:	+1024
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	P
NUMBER OF SENSORS:	2
HOW PROCESSED:	See description
SENSOR LOCATIONS:	CTMT - Loop 1 Hotleg; Incore T/Cs at Core Exit
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:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: RCS Loop 1 pressure (0-2500 PSIG) signal and RCS Loop 1 temperature signal (selectable from 1 of 2 RTD inputs, or 1 of 8 incore thermocouples) are input into subcooling margin monitor system. Saturation pressure and temperature are calculated from the temp and press signals using ASME steam tables stored in memory. The difference between the temperature or pressure signal and the saturation value derived is used to compute the TSAT or PSAT margin. Two independent monitors provide this post accident monitoring information to local and control room indicators.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	SUB MARGIN
POINT ID:	T752
PLANT SPEC POINT DESC.:	Reactor Coolant Hotleg, Subcooling Margin
GENERIC/COND DESC.:	Saturation Temperature - Highest CET
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	DEGF
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	-1024
MAXIMUM INSTR RANGE:	+1024
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	P
NUMBER OF SENSORS:	2
HOW PROCESSED:	See description
SENSOR LOCATIONS:	CTMT - Loop 2 Hotleg; Incore T/Cs at Core Exit
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:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: RCS loop 2 pressure (0-2500 PSIG) signal and RCS loop 2 temperature signal (selectable from 1 of 2 RTD inputs or 1 of 8 incore thermocouples) are input into a subcooling margin monitor system. Saturation pressure and temperature are calculated from the temp and press signals using ASME steam tables stored in memory. The difference between the temperature or pressure signal and the saturation value derived is used to compute the TSAT or PSAT margin. Two independent monitors provide this post accident monitoring information to local and control room indicators.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	HL TEMP 1
POINT ID:	T753
PLANT SPEC POINT DESC.:	RC Loop 1 Hotleg WR Temperature
GENERIC/COND DESC.:	Steam Gen 1 Inlet Temperature
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	DEGF
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	120
MAXIMUM INSTR RANGE:	920
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	S
NUMBER OF SENSORS:	1
HOW PROCESSED:	N/A
SENSOR LOCATIONS:	CTMT - On Loop 1 Hotleg
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:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: B&W designed plants have Once Through Steam Generators (OTSG). There are two inlets and four outlets. The water temperature in the Hotlegs is the inlet temperature to the OTSGs.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	CL TEMP 1
POINT ID:	T781
PLANT SPEC POINT DESC.:	RCP 1-1 Disch Coldleg WR
GENERIC/COND DESC.:	Steam Gen 1 Outlet Temp
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	DEGF
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	50
MAXIMUM INSTR RANGE:	650
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	S
NUMBER OF SENSORS:	1
HOW PROCESSED:	N/A
SENSOR LOCATIONS:	CTMT - On Coldleg RCP 1-1 discharge piping
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:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: B&W designed plants have Once Through Steam Generators (OTSG). There are two inlets and four outlets. The temperature of the water in the Reactor Coolant Pump (RCP) discharge piping, called the Coldlegs, is the RCS temperature after passing through the OTSGs. This computer point indicates the temperature in RCP 1-1 discharge piping.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	HL TEMP 2
POINT ID:	T782
PLANT SPEC POINT DESC.:	RC Loop 2 Hotleg WR Temperature
GENERIC/COND DESC.:	Steam Gen 2 Inlet Temperature
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	DEGF
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	120
MAXIMUM INSTR RANGE:	920
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	S
NUMBER OF SENSORS:	1
HOW PROCESSED:	N/A
SENSOR LOCATIONS:	CTMT - On Loop 2 Hotleg
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:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: B&W designed plants have Once Through Steam Generators (OTSG). There are two inlets and four outlets. The water temperature in the Hotlegs is the inlet temperature to the OTSGs.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	CL TEMP 1
POINT ID:	T801
PLANT SPEC POINT DESC.:	RCP 1-2 Disch Coldleg WR
GENERIC/COND DESC.:	Steam Gen 1 Outlet Temp
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	DEGF
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	50
MAXIMUM INSTR RANGE:	650
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	S
NUMBER OF SENSORS:	1
HOW PROCESSED:	N/A
SENSOR LOCATIONS:	CTMT - On Coldleg RCP 1-2 discharge piping
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:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: B&W designed plants have Once Through Steam Generators (OTSG). There are two inlets and four outlets. The temperature of the water in the Reactor Coolant Pump (RCP) discharge piping, called the Coldlegs, is the RCS temperature after passing through the OTSGs. This computer point indicates the temperature in RCP 1-2 discharge piping.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	CL TEMP 2
POINT ID:	T821
PLANT SPEC POINT DESC.:	RCP 2-1 Disch Coldleg WR
GENERIC/COND DESC.:	Steam Gen 2 Outlet Temp
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	DEGF
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	50
MAXIMUM INSTR RANGE:	650
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	S
NUMBER OF SENSORS:	1
HOW PROCESSED:	N/A
SENSOR LOCATIONS:	CTMT - On Coldleg RCP 2-1 discharge piping
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:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: B&W designed plants have Once Through Steam Generators (OTSG). There are two inlets and four outlets. The temperature of the water in the Reactor Coolant Pump (RCP) discharge piping, called the Coldlegs, is the RCS temperature after passing through the OTSGs. This computer point indicates the temperature in RCP 2-1 discharge piping.

DATA POINT LIBRARY REFERENCE FILE

DATE:	11/01/89
REACTOR UNIT:	DB1
DATA FEEDER:	DADS
NRC ERDS PARAMETER:	CL TEMP 2
POINT ID:	T841
PLANT SPEC POINT DESC.:	RCP 2-2 Disch Coldleg WR
GENERIC/COND DESC.:	Steam Gen 2 Outlet Temp
ANALOG/DIGITAL:	A
ENGR UNITS/DIG STATES:	DEGF
ENGR UNITS CONVERSION:	N/A
MINIMUM INSTR RANGE:	50
MAXIMUM INSTR RANGE:	650
ZERO POINT REFERENCE:	N/A
REFERENCE POINT NOTES:	N/A
PROC OR SENS:	S
NUMBER OF SENSORS:	1
HOW PROCESSED:	N/A
SENSOR LOCATIONS:	CTMT - On Coldleg RCP 2-2 discharge piping
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:	Low
TEMPERATURE COMPENSATION FOR DP TRANSMITTER:	N/A

LEVEL REFERENCE LEG: N/A

UNIQUE SYSTEM DESC.: B&W designed plants have Once Through Steam Generators (OTSG). There are two inlets and four outlets. The temperature of the water in the Reactor Coolant Pump (RCP) discharge piping, called the Coldlegs, is the RCS temperature after passing through the OTSGs. This computer point indicates the temperature in RCP 2-2 discharge piping.