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AUG 2 0 2007

L-2007-129
10CFR50, Appendix E

US Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC, 20555-00001

Re: Turkey Point Units 3 and 4
Docket Nos. 50-250 and 50-251
Emergency Response Data System (ERDS) Maintenance

This letter is being submitted pursuant to 10CFR50, Appendix E, VI, 3.b, "Maintaining the Emergency Response Data System," for Turkey Point Units 3 and 4 due to ERDS Point identification (ID) revisions.

Turkey Point Unit 3 (TP3) will be undergoing a major modification (i.e., replacement) of the Emergency Response Data Acquisition and Display System (ERDADS) during the September, 2007 Refueling Outage. The ERDADS is the plant computer system that supplies the ERDS data points (as described in NUREG-1394, Revision 1).

The TP3 ERDS Data Point Library (DPL) will retain all the original data points (i.e., 61 data points) but will revise the Point IDs to a format that has been established for the new Distributed Control System (DCS) configured ERDADS (see Attachment 1). This Point ID change will affect the ERDS transmission format and computer communication protocol, therefore NRC notification is required 30 days prior to implementation. Implementation of this change is currently scheduled for September 25, 2007. This will require ERDS DPL point ID updates for TP3 by NRC personnel.

Associated "detail" data for several of the points has also been updated to reflect current plant configuration. This too will require ERDS DPL updates for TP3 by NRC personnel.

These changes as well as final ERDS testing will be overseen by vendors from Scientech LLC. The vendor will coordinate the Point ID change-over and testing between TP3 and the NRC Operations Center to minimize ERDS unavailability during this time. The ERDS replacement will be completed prior to TP3 resuming plant operation following the outage.

The Turkey Point Unit 4 (TP4) ERDS will lose two data points during an interim period between the TP3 modification and the planned TP4 modification (currently scheduled for spring, 2008). These two data points, the plant vent gas activity monitor and liquid waste effluent monitor, will only be unavailable to TP4 ERDS and will be communicated to the NRC over the ENS telephones if required during this interim period. Associated "detail" data for several of the TP4 points has also been updated to reflect current plant configuration which will require NRC updating of the TP4 data base.

Turkey Point's original submittal for ERDS compliance in July, 1992, included one (common) Plant Attribute Library (PAL) and two unit-specific DPLs (TP3 and TP4). This submittal updates the original submittal for ERDS compliance. PAL changes include

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plant contact information and new TP3 hardware and software information. In addition, the DPLs list the new TP3 configuration and the "interim" TP4 configuration. The TP4 changes do not affect NRC reception of the transmitted data (See Attachments 2, 3 and 4).

Current scheduling for outage work on the ERDADS (and ERDS) is from September 3, 2007 through October 1, 2007. This activity will be separately communicated to the NRC just prior to the plant outage in accordance with 10CFR50.72 (b) (3) (viii) and will include notification of the NRC resident inspector and any follow up notifications as may be required.

This information is being provided for both compliance to10CFR50, Appendix E, VI, 3.a and 3.b requirements and to support implementation by the NRC of the new TP3 ERDS Data Point IDs.

Should there be any questions, please contact James Connolly, Licensing Manager, at 305-246-6632.

Very truly yours,

William Jefferson, Jr.
Vice President
Turkey Point Nuclear Plant

Attachments

cc: Regional Administrator, Region II, USNRC
Senior Resident Inspector, USNRC, Turkey Point Plant

ATTACHMENT 1

TURKEY POINT UNIT 3

ERDS DATA PARAMETER

POINT ID CHANGES

TP3 ERDS Data Parameter Point IDs			
Item #	**Original Point ID**	**New DCS Point ID**	**Description**
1	NIAVPRLVL-3	NIAVPRL_V	POWER RANGE POWER LEVEL (AVG)
2	NIAVSRLVL-3	NIAVSRL_V	SOURCE RANGE POWER LVL (AVG)
3	NIAVIRLVL-3	NIAVIRL_V	INTERMEDIATE RANGE POWER LVL (AVG)
4	NI6649AVPR-3	N6649AVP_V	GAMMA-METRICS AVE OF PR (AVG)
5	NI6649AVSR-3	N6649AVS_V	GAMMA-METRICS AVE OF SR (AVG)
6	RXHDLVLLO-3	RXHDLLO_V	REACTOR HEAD LEVEL (AUCT LOW)
7	RXPLLVLLO-3	RXPLLLO_V	REACTOR PLENUM LEVEL (AUCT LOW)
8	CET-3	CET_V	CORE EXIT TEMP (AUCT HIGH)
9	SMM1LO-3	SMM1LO_V	SUBCOOLING (AUCT LOW)
10	RCSA-AVFLO-3	RCSA_AVF_V	RCS A AVERAGE FLOW
11	RCSB-AVFLO-3	RCSB_AVF_V	RCS B AVERAGE FLOW
12	RCSC-AVFLO-3	RCSC_AVF_V	RCS C AVERAGE FLOW
13	SGA-AVLVL-3	SGA_AVL_V	STEAM GENERATOR LEVEL A (AVG)
14	LT477-3	L477_A	STM GEN A WIDE RANGE LEVEL
15	SGB-AVLVL-3	SGB_AVL_V	STEAM GENERATOR LEVEL B (AVG)
16	LT487-3	L487_A	STM GEN B WIDE RANGE LEVEL
17	SGC-AVLVL-3	SGC_AVL_V	STEAM GENERATOR LEVEL C (AVG)
18	LT497-3	L497_A	STM GEN C WIDE RANGE LEVEL
19	SGA-AVPRES-3	SGA_AVP_V	STEAM GENERATOR PRESSURE A (AVG)
20	SGB-AVPRES-3	SGB_AVP_V	STEAM GENERATOR PRESSURE B (AVG)
21	SGC-AVPRES-3	SGC_AVP_V	STEAM GENERATOR PRESSURE C (AVG)
22	SGAAVFWFLO-3	SGAAVFWF_V	FEEDWATER FLOW A SG (AVG)
23	SGBAVFWFLO-3	SGBAVFWF_V	FEEDWATER FLOW B SG (AVG)
24	SGCAVFWFLO-3	SGCAVFWF_V	FEEDWATER FLOW C SG (AVG)
25	SGAAFWFLO-3	SGAAFWF_V	AUX FEEDWATER FLOW A SG U3 (TOTAL)
26	SGBAFWFLO-3	SGBAFWF_V	AUX FEEDWATER FLOW B SG U3 (TOTAL)
27	SGCAFWFLO-3	SGCAFWF_V	AUX FEEDWATER FLOW C SG U3 (TOTAL)
28	THA-AVTEMP-3	THA_AVTP_V	RCS HOT LEG A AVG TEMP
29	THB-AVTEMP-3	THB_AVTP_V	RCS HOT LEG B AVG TEMP
30	THC-AVTEMP-3	THC_AVTP_V	RCS HOT LEG C AVG TEMP

TP3 ERDS Data Parameter Point IDs (cont'd)			
Item #	**Original Point ID**	**New DCS Point ID**	**Description**
31	TCA-AVTEMP-3)	TCA_AVTP_V	RCS COLD LEG A AVG TEMP
32	TCB-AVTEMP-3	TCB_AVTP_V	RCS COLD LEG B AVG TEMP
33	TCC-AVTEMP-3	TCC_AVTP_V	RCS COLD LEG C AVG TEMP
34	RCSAVPRES-3	RCSAVP_V	RCS AVG WR PRESSURE
35	PZR-AVLVL-3	PRZ_AVL_V	PRESSURIZER AVERAGE LEVEL
36	FT122-3	F122_A	CHARGING FLOW
37	FT932-3	F932_A	HHSI FLO A HL INSIDE CNTMT
38	FT933-3	F933_A	HHSI FLO B HL INSIDE CNTMT
39	FT943-3	F943_A	HHSI TO BORON INJ TANK
40	FT605-3	F605_A	RHR SYSTEM FLOW
41	CTMTHILVLL-3	CHILVLL_V	CNTMT SUMP WATER LEVEL (AUCT HIGH)
42	CTMTHILVLH-3	CHILVLH_V	CNTMT HR WATER LEVEL (AUCT HIGH)
43	R14-3**	R14_A**	PLANT VENT GAS ACTIVITY RAD MON
44	RAD6304HR-3	R6304HR_A	PLANT VENT GAS GAMMA HI RANGE
45	RAD6304FLO-3	R6304FLO_A	PLANT VENT FLOW RATE
46	RAD6418HR-3	R6418HR_A	U3 FUEL PIT GAS GAMMA HI RANGE
47	R18-3**	R18_A**	LIQUID WASTE EFFLUENT RAD MON
48	R15-3	R15_A	CONDENSER GAS EJECTOR RAD MON
49	RAD6417HR-3	R6417HR_A	AIR EJECTOR GAS GAMMA HI RANGE
50	CTMHRADW-3	CHRADW_V	CNTMT WR RADIATION (AUCT HIGH)
51	R20-3	R20_A	RCS LETDOWN ACTIVITY RAD MON
52	RAD6426-3	R6426_A	MAIN STM LINES GAMMA HI RANGE
53	R19-3	R19_A	SG EFFLUENT PROCESS RAD MON
54	CTMTAVPRSW-3	CAVPRSW_V	CNTMT WR AVG PRESSURE
55	CTMTHITMP-3	C_HITMP_V	CNTMT TEMP (AUCT HIGH)
56	CTMTH2CONC-3	CH2CONC_V	CNTMT H2 CONCENTRATION (AUCT HIGH)
57	RWST3AVLVL-3	RWSTAVL_V	RWST LEVEL (AUCT LOW)
58	WS-10M-TP-4	WS10M_LU_A	WIND SPEED 10 METERS (TP)
59	WD-10M-TP-4	WD10M_LU_A	WIND DIRECTION 10 METERS (TP)
60	D-TMP-B-SD-3	STABB_SD_A	ESTIMATE OF ATMOS STABILITY
61	FAN-3V21-3*	FAN3V21_A*	SPENT FUEL PIT EXHAUST FAN

* Digital Point
** Common Point with Unit 4

ATTACHMENT 2

APPENDIX B

ERDS COMMUNICATIONS DESCRIPTION

AND SURVEY QUESTIONAIRE

TURKEY POINT UNITS 3 AND 4

PLANT ATTRIBUTE LIBRARY

I. CONTACTS

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

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

Paul Banaszak
Florida Power & Light Company
Turkey Point Nuclear Plant
9760 SW 344 St
Homestead, FL 33035
305-246-6072

B. Computer Hardware Specialist(s):

Billy J Wood
ERDADS
Florida Power & Light Company
Turkey Point Nuclear Plant
9760 SW 344 St
Homestead, FL 33035
305-246-6669

C. Systems Software Specialist(s)

Paul Banaszak
(see above)

D. Application-level Software Specialist(s):

Paul Banaszak
(see above)

E. Telephone Systems Specialist(s):

Tom Liberatore
Management Information System Supervisor
Florida Power & Light Company
Turkey Point Nuclear Plant
9760 SW 344 St
Homestead, FL 33035
305-246-4634

II. ERDS COMMUNICATIONS DESCRIPTION

A. Hardware

FPL Turkey Point Nuclear Plant will be a single-feeder site.

B. Software

There are no exceptions to the information described in NUREG-1394, Rev. 1 Appendix B, Section II, ERDS Communications Description (Pages B-3 through B-6).

III. SELECTION OF DATA FEEDERS

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

FPL Turkey Point Nuclear Plant will use a single data feeder for each unit.

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,**

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

   The plant computer system is the Emergency Response Data Acquisition and Display System (ERDADS). This system will provide all categories of PLANT, MET and RAD data for both Turkey Point Units 3 and 4.

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

Since FPL Turkey Point is using a single data feeder for each unit, the single feeder is the "site determining feeder."

IV. DATA FEEDER INFORMATION

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

General Questions

1. **Identification of Data Feeder**

   a. **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.**

      Emergency Response Data Acquisition and Display System (ERDADS).

   b. **Is this the site time determining feeder?**

      Yes.

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

      30 seconds.

2. **Hardware/Software Environment**

   a. **Identify the manufacturer and model number of the data feeder hardware.**

      Unit 3 Manufacturer: Foxboro I/A
      Unit 4 Manufacturer: Modcomp Model Number: III-95

   b. **Identify the operating system.**

      Unit 3: Windows XP
      Unit 4: Max IV with Maxnet.

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

      Daylight Savings.

   d. **In what time zone is this feeder located?**

      Eastern.

IV. DATA FEEDER INFORMATION (CONT)

3. Data Communications Details

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

Yes.

b. Will this feeder transmit in ASCII or EBCDI C?

The feeder transmits in ASCII only.

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

Yes, the feeder can transmit at a serial baud rate of 2400 bps.

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

Yes.

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

No.

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

Serial ports will be available.

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

Currently, only one port exists for the ERDS linkup. The current configuration will not support independent ports for each unit, however additional ports are planned.

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

Yes.

IV. DATA FEEDER INFORMATION (CONT)

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

   The current plan is to provide dedicated ERDS ports for each unit.

4. **Data Feeder Physical Environment and Management**

   a. **Where is the data feeder located in terms of the TSC, EOF, and Control Room?**

      The data feeder is in the Units 3/4 Plant Computer Room, located on the ground floor below the Control Room and Cable Spreading Room.

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

      Yes, the plant computer system is supplied by redundant AC sources with non-vital battery backup.

   c. **Is there a human operator for this data feeder?**

      1. **If so, how many hours a day is the feeder attended?**

         The system engineer is available 8 hours a day, Monday through Friday.

ATTACHMENT 3

APPENDIX C

TURKEY POINT UNIT 3

ERDS DATA POINT LIBRARY

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		NI Power Rng
Point ID:		NIAVPRL_V
Plant Spec Point Desc:		Power Range Power Level
Generic/Cond Desc:		Nuclear Instr, Power Range
Analog/Digital:		A
Engr Units/Dig States:		%
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		120
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		4
How Processed:		4 Input Average, w/3 % Deviation Limit
Sensor Locations:		RX Vessel @ 45, 135, 225, & 315 degrees, 14'El.
Alarm/Trip Set Points:		Hi: 103% Hi-Hi Rx Trip: 108%
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		3% deviation being the limit for use in calculation and Quality determination. The detector type is an excore dual ion chamber (upper-lower arrangement). Hi 103% (Rod Stop) Hi Hi 108% (RX Trip). This instrument also inputs a 2/4 logic for a Low Power – Hi Flux Rx Trip signal at 25% power.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		NI Inter Rng
Point ID:		NIAVIRL_V
Plant Spec Point Desc:		Intermediate Range Power Level
Generic/Cond Desc:		Nuclear Instr, Intermediate Range
Analog/Digital:		A
Engr Units/Dig States:		Amps
Engr Units Conversion:		N/A
Minimum Instr Range:		1.0E -11
Maximum Instr Range:		1.0E -3
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		Rx Vessel @ 90 & 270 Deg. 14' El.
Alarm/Trip Set Points:		P6: 1.001 E -10 Amps
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		<1.0E -10 AMPS
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		5 % Deviation check meaning the value at which point becomes Poor quality. The average is determined from N35_A and N36_A intermediate range channel signals. The detectors are compensated ion chambers located at the core. The P6 setpoint is 1.001 E -10 Amps. This instrument also inputs a 1/2 logic Low Power Rx trip signal at 1.2 E -4 amps (equiv to 25% power).

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		NI Source Rng
Point ID:		NIAVSRL_V
Plant Spec Point Desc:		Source Range Power Level
Generic/Cond Desc:		Nuclear Instr, Source Range
Analog/Digital:		A
Engr Units/Dig States:		CPS
Engr Units Conversion:		N/A
Minimum Instr Range:		1.0E +0
Maximum Instr Range:		1.0E +6
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		Rx Vessel @ 90 & 270 Deg. 14' El.
Alarm/Trip Set Points:		Rx Trip at 1.0E5 CPS
NI Detector Power Supply Cut-off Power Level:		>1.0E4 CPS (P6 Permissive)
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		5 % Deviation check meaning the value at which point becomes Poor Quality. The average is determined from N31_A and N32_A source range channel signals. The detectors are in the lower half of detector wells shared with the intermediate range detectors.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		N6649AVP_V
Plant Spec Point Desc:		Gammametrics PR Avg
Generic/Cond Desc:		Nuclear Instruments, Power Rng
Analog/Digital:		A
Engr Units/Dig States:		%
Engr Units Conversion:		N/A
Minimum Instr Range:		1.0E -8
Maximum Instr Range:		200
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P2
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		RX Vessel @ 0 and 180 Deg. 14' El.
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:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		5 % Deviation check meaning the value at which point becomes Poor Quality. The Gammametrics Source Range Detectors are located in the same wells as the Gammametrics Power Range Detectors.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		N6649AVS_V
Plant Spec Point Desc:		Gammametrics SR Avg
Generic/Cond Desc:		Nuclear Instruments, Source Rng
Analog/Digital:		A
Engr Units/Dig States:		CPS
Engr Units Conversion:		N/A
Minimum Instr Range:		$1.0E^{-1}$
Maximum Instr Range:		$1.0E^{+5}$
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		RX Vessel @ 0 and 180 Deg. 14' El.
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:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		5 % Deviation check meaning the value at which point becomes Poor Quality. The Gammametrics Source Range Detectors are located in the same detector wells as the Gammametrics Power Range Detectors.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		Reac Ves Lev
Point ID:		RXHDLLO_V
Plant Spec Point Desc:		Reactor Upper Head Level
Generic/Cond Desc:		Reactor Vessel Water Level
Analog/Digital:		A
Engr Units/Dig States:		%
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		100
Zero Point Reference:		TAF
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Low Select
Sensor Locations:		RX Vessel – Upper Head
Alarm/Trip Set Points:		Lo-Lo: 99.99%
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		Reactor head water level indication consists of the lower of 2 QSPDS Trains of the top 2 sensors (1 & 2) of an eight sensor probe. Each sensor consists of a heated and an unheated thermocouple pair. The probe extends from the top of the head to the top of the fuel alignment plate. Sensor 1 is at 179" (33% indicated) above the fuel and sensor 2 is 142" (0% indicated).

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		RXPLLLO_V
Plant Spec Point Desc:		Reactor Plenum Water Level
Generic/Cond Desc:		Reactor Vessel Plenum Water Level
Analog/Digital:		A
Engr Units/Dig States:		%
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		100
Zero Point Reference:		TAF
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Low Select
Sensor Locations:		Rx Vessel-Plenum Above Core
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:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		Reactor plenum water level indication consists of the lower of 2 QSPDS Trains of the lower 6 sensors (3-8) of an eight sensor probe. Each sensor consists of a heated and an unheated thermocouple pair. Sensor locations above the fuel from top to bottom (i.e., sensors 3-8) are 128", 98", 69", 55", 40", and 24" respectively. Indicated levels are 81%, 58%, 40%, 28%, 16%, and 0% respectively.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		Temp Core Ex
Point ID:		CET_V
Plant Spec Point Desc:		Core Exit Temperature
Generic/Cond Desc:		Highest Temp At Core Exit
Analog/Digital:		A
Engr Units/Dig States:		°F
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:		2
How Processed:		2 Input Hi Select
Sensor Locations:		Inside Reactor Vessel-Core Exit Area
Alarm/Trip Set Points:		Lo: 540°F Hi: 650°F
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		Signals originate from 2 QSPDS (Qualified Safety Parameter Display System) Channel Trains selecting the higher of 2 calculated representative core exit thermocouple (CET) temperatures. The representative CET temperature is the average of the highest eight valid CETs for that Train.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		Sub Margin
Point ID:		SCMCETLO_V
Plant Spec Point Desc:		Subcooling
Generic/Cond Desc:		Sat Temp – Highest CET
Analog/Digital:		A
Engr Units/Dig States:		°F
Engr Units Conversion:		N/A
Minimum Instr Range:		- 2100
Maximum Instr Range:		700
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Low Select
Sensor Locations:		Core Exit Channels
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:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		Signals originate from 2 QSPDS (Qualified Safety Parameter Display System) Channel Trains selecting the lower of 2 calculated subcooled margins. The QSPDS subcooled margin calculation for each Train uses a representative CET temperature input (based on statistical analyses) as measured against saturation temperature for existing RCS pressure.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		RCSA_AVF_V
Plant Spec Point Desc:		RCS A Average Flow
Generic/Cond Desc:		RCS Loop A Coolant Flow
Analog/Digital:		A
Engr Units/Dig States:		%
Engr Units Conversion:		1% = 895 gpm
Minimum Instr Range:		0
Maximum Instr Range:		120
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		3
How Processed:		3 Input Average w/6 % Deviation Limit
Sensor Locations:		RCS Lower Loop Piping
Alarm/Trip Set Points:		Lo: 104% LoLo Rx Trip: 90%
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		No
Level Reference Leg:		N/A
Unique System Desc:		6% deviation (5370 gpm) being the limit for use in averaging calculation and for Quality determination. The flow is based on a differential pressure developed by a flow elbow located in the main coolant loop. 100% flow: ~ 89,500 gpm. Lo RCS Flow Rx Trip at ~90%. Minimum DNB flow: 104%.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		RCSB_AVF_V
Plant Spec Point Desc:		RCS B Average Flow
Generic/Cond Desc:		RCS Loop B Coolant Flow
Analog/Digital:		A
Engr Units/Dig States:		%
Engr Units Conversion:		1% = 895 gpm
Minimum Instr Range:		0
Maximum Instr Range:		120
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		3
How Processed:		3 Input Average w/6 % Deviation Limit
Sensor Locations:		RCS Lower Loop Piping
Alarm/Trip Set Points:		Lo: 104% LoLo Rx Trip: 90%
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		No
Level Reference Leg:		N/A
Unique System Desc:		6% deviation (5370 gpm) being the limit for use in averaging calculation and for Quality determination. The flow is based on a differential pressure developed by a flow elbow located in the main coolant loop. 100% flow: ~ 89,500 gpm. Lo RCS Flow Rx Trip at ~90%. Minimum DNB flow: 104%.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		RCSC_AVF_V
Plant Spec Point Desc:		RCS C Average Flow
Generic/Cond Desc:		RCS Loop C Coolant Flow
Analog/Digital:		A
Engr Units/Dig States:		%
Engr Units Conversion:		1% = 895 gpm
Minimum Instr Range:		0
Maximum Instr Range:		120
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		3
How Processed:		3 Input Average w/6 % Deviation Limit
Sensor Locations:		RCS Lower Loop Piping
Alarm/Trip Set Points:		Lo: 104% LoLo Rx Trip: 90%
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		NO
Level Reference Leg:		N/A
Unique System Desc:		6% deviation (5370 gpm) being the limit for use in averaging calculation and for Quality determination. The flow is based on a differential pressure developed by a flow elbow located in the main coolant loop. 100% flow: ~ 89,500 gpm. Lo RCS Flow Rx Trip at ~90%. Minimum DNB flow: 104%.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		SG LEVEL 1/A
Point ID:		SGA_AVL_V
Plant Spec Point Desc:		Steam Generator Level A
Generic/Cond Desc:		Steam Generator A Water Level
Analog/Digital:		A
Engr Units/Dig States:		%
Engr Units Conversion:		1% = 112.5 GALLONS
Minimum Instr Range:		0
Maximum Instr Range:		100
Zero Point Reference:		U-Tubes
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		3
How Processed:		3 Input Average w/10% Deviation Limit
Sensor Locations:		SG Vessel A 30' 6" El
Alarm/Trip Set Points:		Lo-Lo Rx Trip: 10% Lo: 35% Hi 68% Hi-Hi: 80%
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		NO
Level Reference Leg:		WET
Unique System Desc:		10 % deviation being the limit for use in calculation and quality determination. 0% = 16,250 gal 100% = 27,500 gal The lower tap is 8" above the top of the tube bundle. Protection Train: 10 % Reactor Trip, 80 % Turbine Trip

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		L477_A
Plant Spec Point Desc:		Steam Generator A Wide Rng Level
Generic/Cond Desc:		Steam Generator A WR Water Level
Analog/Digital:		A
Engr Units/Dig States:		%
Engr Units Conversion:		See Description
Minimum Instr Range:		0
Maximum Instr Range:		100
Zero Point Reference:		Tubesheet
Reference Point Notes:		N/A
PROC or SENS:		S
Number of Sensors:		1
How Processed:		N/A
Sensor Locations:		Containment 30' 6" El
Alarm/Trip Set Points:		Lo: 40% Hi: 93%
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		No
Level Reference Leg:		WET
Unique System Desc:		0% = 750 gal 100% = 27,500 gal Percent to gal conversion is: 0-52 %: 187 gal / % 52-73 %: 274 gal / % 73-100 %: 417 gal / %.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		SG LEVEL 2/B
Point ID:		SGB_AVL_V
Plant Spec Point Desc:		Steam Generator Level B
Generic/Cond Desc:		Steam Generator B Water Level
Analog/Digital:		A
Engr Units/Dig States:		%
Engr Units Conversion:		1% = 112.5 GALLONS
Minimum Instr Range:		0
Maximum Instr Range:		100
Zero Point Reference:		U-Tubes
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		3
How Processed:		3 Input Average w/10% Deviation Limit
Sensor Locations:		SG Vessel B 30' 6" El
Alarm/Trip Set Points:		Lo-Lo Rx Trip: 10% Lo: 35% Hi 68% Hi-Hi: 80%
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		No
Level Reference Leg:		Wet
Unique System Desc:		10 % deviation being the limit for use in calculation and quality determination. 0% = 16,250 gal 100% = 27,500 gal The lower tap is 8" above the top of the tube bundle. Protection Train: 10 % Reactor Trip, 80 % Turbine Trip.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		L487_A
Plant Spec Point Desc:		Steam Generator B Wide Rng Level
Generic/Cond Desc:		Steam Generator B WR Water Level
Analog/Digital:		A
Engr Units/Dig States:		%
Engr Units Conversion:		See Description
Minimum Instr Range:		0
Maximum Instr Range:		100
Zero Point Reference:		Tubesheet
Reference Point Notes:		N/A
PROC or SENS:		S
Number of Sensors:		1
How Processed:		N/A
Sensor Locations:		Containment 30' 6" El
Alarm/Trip Set Points:		Lo: 40% Hi: 93%
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		No
Level Reference Leg:		WET
Unique System Desc:		0% = 750 gal 100% = 27,500 gal Percent to GAL conversion is: 0-52 %: 187 gal / % 52-73 %: 274 gal / % 73-100 %: 417 gal / %

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		SG LEVEL 3/C
Point ID:		SGC_AVL_V
Plant Spec Point Desc:		Steam Generator Level C
Generic/Cond Desc:		Steam Generator C Water Level
Analog/Digital:		A
Engr Units/Dig States:		%
Engr Units Conversion:		1% = 112.5 gallons
Minimum Instr Range:		0
Maximum Instr Range:		100
Zero Point Reference:		U-Tubes
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		3
How Processed:		3 Input Average w/10% Deviation Limit
Sensor Locations:		SG Vessel C 30' 6" El
Alarm/Trip Set Points:		Lo-Lo Rx Trip: 10% Lo: 35% Hi 68% Hi-Hi: 80%
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		No
Level Reference Leg:		Wet
Unique System Desc:		10 % deviation being the limit for use in calculation and quality determination. 0% = 16,250 gal 100% = 27,500 gal The lower tap is 8" above the top of the tube bundle. Protection Train: 10 % Reactor Trip, 80 % Turbine Trip.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		L497_A
Plant Spec Point Desc:		Steam Generator C Wide Rng Level
Generic/Cond Desc:		Steam Generator C WR Water Level
Analog/Digital:		A
Engr Units/Dig States:		%
Engr Units Conversion:		See Description
Minimum Instr Range:		0
Maximum Instr Range:		100
Zero Point Reference:		Tubesheet
Reference Point Notes:		N/A
PROC or SENS:		S
Number of Sensors:		1
How Processed:		N/A
Sensor Locations:		Containment 30' 6" El
Alarm/Trip Set Points:		Lo: 40% Hi: 93%
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		No
Level Reference Leg:		WET
Unique System Desc:		0% = 750 gal 100% = 27,500 gal Percent to GAL conversion is: 0-52 %: 187 gal / % 52-73 %: 274 gal / % 73-100 %: 417 gal / %

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		SG PRESS 1/A
Point ID:		SGA_AVP_V
Plant Spec Point Desc:		Steam Generator Pressure A
Generic/Cond Desc:		Steam Generator A Pressure
Analog/Digital:		A
Engr Units/Dig States:		psig
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		1400
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		3
How Processed:		3 Input Average w/25 psig Deviation limit
Sensor Locations:		SG A Steam Line before MSIV
Alarm/Trip Set Points:		Lo: 614 psig Hi: 1085 psig
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		25 psig deviation being the limit for use in calculation and for Quality determination. ESF actuation signals: SG pressure 100 psig < steam header pressure SG pressure of < 614 psig

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		SG PRESS 2/B
Point ID:		SGB_AVP_V
Plant Spec Point Desc:		Steam Generator Pressure B
Generic/Cond Desc:		Steam Generator B Pressure
Analog/Digital:		A
Engr Units/Dig States:		psig
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		1400
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		3
How Processed:		3 Input Average w/25 psig Deviation limit
Sensor Locations:		SG B Steam Line before MSIV
Alarm/Trip Set Points:		Lo: 614 psig Hi: 1085 psig
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		25 psig deviation being the limit for use in calculation and for Quality determination. ESF actuation signals: SG pressure 100 psig < steam header pressure SG pressure of < 614 psig

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		SG PRESS 3/C
Point ID:		SGC_AVP_V
Plant Spec Point Desc:		Steam Generator Pressure C
Generic/Cond Desc:		Steam Generator C Pressure
Analog/Digital:		A
Engr Units/Dig States:		psig
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		1400
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		3
How Processed:		3 Input Average w/25 psig Deviation limit
Sensor Locations:		SG C Steam Line before MSIV
Alarm/Trip Set Points:		Lo: 614 psig Hi: 1085 psig
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		N/A
Temperature Compensation For DP Transmitters		As-Is
Level Reference Leg:		N/A
Unique System Desc:		25 psig deviation being the limit for use in calculation and for Quality determination. ESF actuation signals: SG pressure 100 psig < steam header pressure SG pressure of < 614 psig

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		MN FD FL 1/A
Point ID:		SGAAVFWF_V
Plant Spec Point Desc:		Feedwater Flow A SG
Generic/Cond Desc:		Steam Generator A Mn Feedwater Fl
Analog/Digital:		A
Engr Units/Dig States:		Lb/Hr
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		4.0E $^{+}$6
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		Upstream FW Regulating Valve
Alarm/Trip Set Points:		See Description
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		No
Level Reference Leg:		N/A
Unique System Desc:		5 % Deviation check meaning the value at which point becomes poor quality. Protection Train instrumentation has 2 separate channels of input to a reactor trip signal when: Feedwater flow < Steam Flow @ 640,000 lb/Hr coincident SG level of ~10% Feedwater < Steam Flow alarm @ 500,000 lb/Hr

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		MN FD FL 2/B
Point ID:		SGBAVFWF_V
Plant Spec Point Desc:		Feedwater Flow B SG
Generic/Cond Desc:		Steam Generator B Mn Feedwater Fl
Analog/Digital:		A
Engr Units/Dig States:		lb/Hr
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		4.0E +6
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		Upstream FW Regulating Valve
Alarm/Trip Set Points:		See Description
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		NO
Level Reference Leg:		N/A
Unique System Desc:		5 % Deviation check meaning the value at which point becomes poor quality. Protection Train instrumentation has 2 separate channels of input to a reactor trip signal when: Feedwater flow < Steam Flow @ 640,000 lb/Hr coincident SG level of ~10% Feedwater < Steam Flow alarm @ 500,000 lb/Hr

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		MN FD FL 3/C
Point ID:		SGCAVFWF_V
Plant Spec Point Desc:		Feedwater Flow C SG
Generic/Cond Desc:		Steam Generator C Mn Feedwater Fl
Analog/Digital:		A
Engr Units/Dig States:		lb/Hr
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		4.0E +6
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		Upstream FW Regulating Valve
Alarm/Trip Set Points:		See Description
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		No
Level Reference Leg:		N/A
Unique System Desc:		5 % Deviation check meaning the value at which point becomes poor quality. Protection Train instrumentation has 2 separate channels of input to a reactor trip signal when: Feedwater flow < Steam Flow @ 640,000 lb/Hr coincident SG level of ~10% Feedwater < Steam Flow alarm @ 500,000 lb/Hr

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		AX FD FL 1/A
Point ID:		SGAAFWF_V
Plant Spec Point Desc:		Aux Feedwater Flow A SG
Generic/Cond Desc:		Steam Generator A Aux FW Flow
Analog/Digital:		A
Engr Units/Dig States:		gpm
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:		2
How Processed:		2 Input Sum
Sensor Locations:		Aux FW lines
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:		As-Is
Temperature Compensation For DP Transmitters		NO
Level Reference Leg:		N/A
Unique System Desc:		Total AFW flow is the sum of Train One and Train Two to each SG. The aux feed is supplied by 3 steam driven pumps which discharge to 2 redundant trains. Each train supplies flow to both Units and may feed any of the SGs. Administratively, pump A is aligned to Train One and pumps B and C to Train Two. The 2 condensate storage tanks are the normal water supplies to the AFW pumps.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		AX FD FL 2/B
Point ID:		SGBAFWF_V
Plant Spec Point Desc:		Aux Feedwater Flow B SG
Generic/Cond Desc:		Steam Generator B Aux FW Flow
Analog/Digital:		A
Engr Units/Dig States:		gpm
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:		2
How Processed:		2 Input Sum
Sensor Locations:		Aux FW lines
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:		As-Is
Temperature Compensation For DP Transmitters		NO
Level Reference Leg:		N/A
Unique System Desc:		Total AFW flow is the sum of Train One and Train Two to each SG. The aux feed is supplied by 3 steam driven pumps which discharge to 2 redundant trains. Each train supplies flow to both Units and may feed any of the SGs. Administratively, pump A is aligned to Train One and pumps B and C to Train Two. The 2 condensate storage tanks are the normal water supplies to the AFW pumps.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		AX FD FL 3/C
Point ID:		SGCAFWF_V
Plant Spec Point Desc:		Aux Feedwater Flow C SG
Generic/Cond Desc:		Steam Generator C Aux FW Flow
Analog/Digital:		A
Engr Units/Dig States:		gpm
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:		2
How Processed:		2 Input Sum
Sensor Locations:		Aux FW lines
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:		As-Is
Temperature Compensation For DP Transmitters		No
Level Reference Leg:		N/A
Unique System Desc:		Total AFW flow is the sum of Train One and Train Two to each SG. The aux feed is supplied by 3 steam driven pumps which discharge to 2 redundant trains. Each train supplies flow to both Units and may feed any of the SGs. Administratively, pump A is aligned to Train One and pumps B and C to Train Two. The 2 condensate storage tanks are the normal water supplies to the AFW pumps.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		HL TEMP 1/A
Point ID:		THA_AVTP_V
Plant Spec Point Desc:		RCS Hot Leg A Avg Temp
Generic/Cond Desc:		Steam Generator A Inlet Temp
Analog/Digital:		A
Engr Units/Dig States:		°F
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		750
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		RCS Hot Leg A Piping 14' El
Alarm/Trip Set Points:		Lo: 540°F Hi: 610°F
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		5 % Deviation check meaning the value at which point becomes Poor Quality. The sensors are platinum RTDs which are located in wells in the main coolant loops. The loop T-Hot signals are also inputs to the Qualified Safety Parameter Display System.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		HL TEMP 2/B
Point ID:		THB_AVTP_V
Plant Spec Point Desc:		RCS Hot Leg B Avg Temp
Generic/Cond Desc:		Steam Generator B Inlet Temp
Analog/Digital:		A
Engr Units/Dig States:		°F
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		750
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		RCS Hot Leg B Piping 14' El
Alarm/Trip Set Points:		Lo: 540°F Hi: 610°F
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		5 % Deviation check meaning the value at which point becomes Poor Quality. The sensors are platinum RTDs which are located in wells in the main coolant loops. The loop T-Hot signals are also inputs to the Qualified Safety Parameter Display System.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		HL TEMP 3/C
Point ID:		THC_AVTP_V
Plant Spec Point Desc:		RCS Hot Leg C Avg Temp
Generic/Cond Desc:		Steam Generator C Inlet Temp
Analog/Digital:		A
Engr Units/Dig States:		°F
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		750
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		RCS Hot Leg C Piping 14' El
Alarm/Trip Set Points:		Lo: 540°F Hi: 610°F
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		5 % Deviation check meaning the value at which point becomes Poor Quality. The sensors are platinum RTDs which are located in wells in the main coolant loops. The loop T-Hot signals are also inputs to the Qualified Safety Parameter Display System.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		CL TEMP 1/A
Point ID:		TCA_AVTP_V
Plant Spec Point Desc:		RCS Cold Leg A Avg Temp
Generic/Cond Desc:		Steam Generator A Outlet Temp
Analog/Digital:		A
Engr Units/Dig States:		°F
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		750
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		RCS Cold Leg A Piping 14' El
Alarm/Trip Set Points:		Lo: 540°F H: 555°F
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		5 % Deviation check meaning the value at which point becomes Poor Quality. The sensors are platinum RTDs which are located in wells in the main coolant loops. The loop T-Cold signals are also inputs to the Qualified Safety Parameter Display System.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		CL TEMP 2/B
Point ID:		TCB_AVTP_V
Plant Spec Point Desc:		RCS Cold Leg B Avg Temp
Generic/Cond Desc:		Steam Generator B Outlet Temp
Analog/Digital:		A
Engr Units/Dig States:		°F
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		750
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		RCS Cold Leg B Piping 14' El
Alarm/Trip Set Points:		Lo: 540°F H: 555°F
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		5 % Deviation check meaning the value at which point becomes Poor Quality. The sensors are platinum RTDs which are located in wells in the main coolant loops. The loop T-Cold signals are also inputs to the Qualified Safety Parameter Display System.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		CL TEMP 3/C
Point ID:		TCC_AVTP_V
Plant Spec Point Desc:		RCS Cold Leg C Avg Temp
Generic/Cond Desc:		Steam Generator C Outlet Temp
Analog/Digital:		A
Engr Units/Dig States:		°F
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		750
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		RCS Cold Leg C Piping 14' El
Alarm/Trip Set Points:		Lo: 540°F Hi: 555°F
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		5 % Deviation check meaning the value at which point becomes Poor Quality. The sensors are platinum RTDs which are located in wells in the main coolant loops. The loop T-Cold signals are also inputs to the Qualified Safety Parameter Display System.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		RCS PRESSURE
Point ID:		RCSAVP_V
Plant Spec Point Desc:		RCS Pressure WR
Generic/Cond Desc:		Reactor Coolant System Pressure
Analog/Digital:		A
Engr Units/Dig States:		psig
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		3000
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		RCS Loop A & B Hot Legs 14' El
Alarm/Trip Set Points:		Lo: 1910 psig Hi: 2310 psig
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		RCS pressure is the average of 2 inputs (P404 & P406). 5 % Deviation check meaning the value at which point becomes Poor Quality.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		PRZR LEVEL
Point ID:		PRZ_AVL_V
Plant Spec Point Desc:		Pressurizer Average Level
Generic/Cond Desc:		Primary System Pressurizer Level
Analog/Digital:		A
Engr Units/Dig States:		%
Engr Units Conversion:		1% = 84.5 gallons
Minimum Instr Range:		0
Maximum Instr Range:		100
Zero Point Reference:		Complx
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		3
How Processed:		3 Input Average
Sensor Locations:		PRZ Vessel 30' El
Alarm/Trip Set Points:		Lo: 14% Hi: 92%
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		No
Level Reference Leg:		Wet
Unique System Desc:		The pressurizer average level is calculated using 5 minute rolling averages of 3 redundant sensors. The instrument range of 0-100% is equivalent to 600-9050 gallons. Protection Channel inputs include: PZR Hi-Level Rx trip (2/3 at 91%), Lo-Lo level alarm at 6%, PZR heaters Off and letdown isolate at 14.4%, Hi level alarm and heaters on at +5% program, and Lo level alarm at -5% program.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		RCS CHG/MU
Point ID:		F122_A
Plant Spec Point Desc:		Charging Flow
Generic/Cond Desc:		Primary System Charging/MU Flow
Analog/Digital:		A
Engr Units/Dig States:		gpm
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		150
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		S
Number of Sensors:		1
How Processed:		N/A
Sensor Locations:		Charging Pumps Discharge Header
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 Transmitters		No
Level Reference Leg:		N/A
Unique System Desc:		Charging flow is provided by 3 electrically driven positive displacement pumps. The discharge is to a common header (where the flow is measured) and provides cooled RCP seal water flow and re-heated flow that can be directed to loops A cold leg, C hot leg, or to the pressurizer auxiliary spray line. Charging flow rate is normally controlled by pressurizer level.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		F932_A
Plant Spec Point Desc:		HHSI Flo A HL Inside Containment
Generic/Cond Desc:		High Press SI Flow To HL A
Analog/Digital:		A
Engr Units/Dig States:		gpm
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:		S
Number of Sensors:		1
How Processed:		N/A
Sensor Locations:		On SI line to Hot Leg A 14' El
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 Transmitters		No
Level Reference Leg:		N/A
Unique System Desc:		FT-932 measures HHSI flow to the loop A hot leg. HHSI is provided by 2 electrically driven pumps. The water supply is the Unit 3 RWST. The discharge of each pump is directed to a common discharge header to the A and/or B hot legs. Note: The Unit 3 & 4 RWSTs may be cross-connected and Unit 3 & 4 HHSI pumps discharge headers may be cross-connected.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		F933_A
Plant Spec Point Desc:		HHSI Flo B HL Inside Containment
Generic/Cond Desc:		High Press SI Flow To HL B
Analog/Digital:		A
Engr Units/Dig States:		gpm
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:		S
Number of Sensors:		1
How Processed:		N/A
Sensor Locations:		On SI line to Hot Leg B 14' El
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 Transmitters		No
Level Reference Leg:		N/A
Unique System Desc:		FT-933 measures HHSI flow to loop A and/or B hot legs. HHSI is provided by 2 electrically driven pumps. The water supply is the Unit 3 RWST. The discharge of each pump is directed to a common discharge header to the A and/or B hot legs. Note: The Unit 3 & 4 RWSTs may be cross-connected and Unit 3 & 4 HHSI pumps discharge headers may be cross-connected.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		HPSI FLOW
Point ID:		F943_A
Plant Spec Point Desc:		HHSI Flo To BIT To Cold Legs
Generic/Cond Desc:		High Press SI Flow To Cold Legs
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:		S
Number of Sensors:		1
How Processed:		N/A
Sensor Locations:		SI line upstream of Discharge Header MOVs
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 Transmitters		No
Level Reference Leg:		N/A
Unique System Desc:		FT-943 measures total HHSI flow to loops A, B, and C cold legs. HHSI is provided by 2 electrically driven pumps. The water supply is the Unit 3 RWST. The discharge of each pump is directed to a common discharge header to the 3 cold legs. Note: The Unit 3 & 4 RWSTs may be cross-connected and Unit 3 & 4 HHSI pumps discharge headers may be cross-connected.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		LP SI FLOW
Point ID:		F605_A
Plant Spec Point Desc:		RHR System Flow
Generic/Cond Desc:		Lo Pressure SI Flow
Analog/Digital:		A
Engr Units/Dig States:		gpm
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		8500
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		S
Number of Sensors:		1
How Processed:		N/A
Sensor Locations:		RHR/SI Header to Cold Legs (in RHR HX Room)
Alarm/Trip Set Points:		Hi: 7000 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 Transmitters		No
Level Reference Leg:		N/A
Unique System Desc:		FT-605 measures the Residual Heat Removal (RHR) flow. RHR is provided by 2 RHR pumps. Each pump discharges to its own associated heat exchanger. Flow from the heat exchangers are combined into a single header for penetration into containment. Flow in this header is measured by FT-605, flow is then directed to loops A, B, and C cold legs. This flow signal also actuates a low flow alarm annunciator at 3000 gpm.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		CTMNT SMP NR
Point ID:		CHILVLL_V
Plant Spec Point Desc:		CNTMT LR Sump Water Level
Generic/Cond Desc:		Containment Sump Lo-Range Level
Analog/Digital:		A
Engr Units/Dig States:		Inches
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		369
Zero Point Reference:		-18' 8" El
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Hi Select w/ 5% Deviation check
Sensor Locations:		Containment 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:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		Containment sump level is the highest of the two sump level channels. Each channel consists of 5 segment, float and reed switch level column. The level column starts at the -18'8" elevation (i.e., below sea level) and covers 30'9" of level. The conversion from inches to gallons is non-linear. Note: The elevation between 12' and 14'3" is not covered by the containment sump or containment level transmitters.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		CTMNT SMP WR
Point ID:		CHILVLH_V
Plant Spec Point Desc:		CNTMT HR Water Level
Generic/Cond Desc:		Containment Sump Hi-Range Level
Analog/Digital:		A
Engr Units/Dig States:		Inches
Engr Units Conversion:		N/A
Minimum Instr Range:		397
Maximum Instr Range:		487.5
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Hi Select
Sensor Locations:		Containment Floor 14' El & Above
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:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		Containment level is the highest of the 2 containment level channels. Each channel consists of a float and reed switch level column. The level column starts at the 14'3" elevation and covers 7'6" of level. The conversion from inches to gallons is non-linear. Note: The elevation between 12' and 14'3" is not covered by the containment sump or containment level transmitters.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		R14_A
Plant Spec Point Desc:		Plant Vent Gas Activity
Generic/Cond Desc:		Radioactivity Of A Released Gas
Analog/Digital:		A
Engr Units/Dig States:		cpm
Engr Units Conversion:		N/A
Minimum Instr Range:		10
Maximum Instr Range:		1E6
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		S
Number of Sensors:		1
How Processed:		N/A
Sensor Locations:		Top Of Plant Vent Stack
Alarm/Trip Set Points:		Determined By Radiochemist
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:		R-14 is installed inside the plant vent. It consists of 4 thin-walled Gieger-Mueller tube detectors arranged across the plant vent stack diameter. The 4 detectors operate in parallel, are Beta-Gamma sensitive in the range of 5E-7 to 1E-4 Ci/cc, and have a check source. R-14 alarm will automatically close the Gas Decay Tank discharge valve upon actuation. Note: cpm to uCi/cc conversion factor is 2E8 ml/cc at sample flow rate.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		EFF GAS RAD
Point ID:		R6304HR_A
Plant Spec Point Desc:		Plant Vent Gas Gamma Hi Range
Generic/Cond Desc:		Radioactivity Of Released Gases
Analog/Digital:		A
Engr Units/Dig States:		uCi/cc
Engr Units Conversion:		N/A
Minimum Instr Range:		1.0E-1
Maximum Instr Range:		1.0E5
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		1
How Processed:		Data Link
Sensor Locations:		Auxiliary Building
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:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		An Eberline SPING Unit provides Plant Vent High Range Noble Gas Activity. The detector type is a Geiger-Mueller tube, uncompensated with a check source. The plant vent stack is the normal discharge path for: Unit 3 & 4 containment purge, auxiliary building exhaust and Unit 4 SFP. Note: Unit 3 SFP exhaust is through a dedicated stack.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		R6304FLO_A
Plant Spec Point Desc:		Plant Vent Flow Rate
Generic/Cond Desc:		Plant Vent Stack Flow Rate
Analog/Digital:		A
Engr Units/Dig States:		cfm
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		$1.5E^{+}5$
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		1
How Processed:		Data Link
Sensor Locations:		Plant Vent Stack Near Top
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:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		Plant vent flow is provided by transmitter FT-6584 which measures the differential pressure across a flow orifice installed in the plant vent stack. The signal is processed by an optional analog to digital channel (#10) on the Plant Vent SPING unit. Note: Loss of plant vent flow channel will not affect the calibration of the plant vent high range gas monitor which is based on a fixed sample flow rate.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		R6418HR_A
Plant Spec Point Desc:		U3 Fuel Pool Gas Gamma Hi Rng
Generic/Cond Desc:		Radioactivity Of Released Gases
Analog/Digital:		A
Engr Units/Dig States:		uCi/cc
Engr Units Conversion:		N/A
Minimum Instr Range:		$1.0E^{-}1$
Maximum Instr Range:		$1.0E^{+}5$
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		1
How Processed:		Data Link
Sensor Locations:		U3 Spent Fuel Pool Vent Stack
Alarm/Trip Set Points:		Determined By Radiochemist
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		An Eberline SPING Unit provides the Unit 3 Spent Fuel Pit High Range Noble Gas Activity. The detector type is a Geiger-Mueller tube, uncompensated with a check source. The Unit 3 spent fuel pit exhaust is through a dedicated stack. The flow rate is ~18,500 cfm when the exhaust fan is running. Note: Use point FAN3V21_A as an indication of fan running.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		EFF LIQ RAD
Point ID:		R18_A
Plant Spec Point Desc:		Liquid Release Gross Activity
Generic/Cond Desc:		Radioactivity Of Released Liquid
Analog/Digital:		A
Engr Units/Dig States:		cpm
Engr Units Conversion:		N/A
Minimum Instr Range:		10
Maximum Instr Range:		$1.0E^{+}6$
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		S
Number of Sensors:		1
How Processed:		N/A
Sensor Locations:		Liquid Release Line In Aux Bldg
Alarm/Trip Set Points:		Determined By Radiochemist
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:		R-18 monitors liquid waste release activity in the waste discharge header upstream of the liquid release isolation valve RCV-018. The detector is a sodium iodide scintillation tube, lead shielded against background. The alarm setpoint is plant condition dependent and set by the Radiochemist. The liquid waste control valve (RCV-18) auto isolates on a high activity alarm. Note: the cpm to uci/cc conversion factor is 2.96E7 ml-cpm at 100 gpm.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		R15_A
Plant Spec Point Desc:		Condenser Air Ejector (PRMS)
Generic/Cond Desc:		Condenser Air Ejector Rad
Analog/Digital:		A
Engr Units/Dig States:		cpm
Engr Units Conversion:		N/A
Minimum Instr Range:		10
Maximum Instr Range:		$1.0E^{+}6$
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 Deck
Alarm/Trip Set Points:		Determined By Radiochemist
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:		R-15, the Condenser Air Ejector Monitor uses a thin wall Geiger-Mueller tube detector. The detector is located in the air ejector exhaust manifold and uses lead shielding against background. The alarm setpoint is plant condition dependent and is determined by the Radiochemist.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		COND A/E RAD
Point ID:		R6417HR_A
Plant Spec Point Desc:		Air Ejector Gas Gamma Hi-Rng
Generic/Cond Desc:		Condenser Air Ejector Rad
Analog/Digital:		A
Engr Units/Dig States:		uCi/cc
Engr Units Conversion:		N/A
Minimum Instr Range:		$1.0E^{-}1$
Maximum Instr Range:		$1.0E^{+}5$
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		1
How Processed:		Data Link
Sensor Locations:		Turbine Deck
Alarm/Trip Set Points:		Determined By Radiochemist
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		M/A
Unique System Desc:		An Eberline SPING Unit provides the Air Ejector Plant Vent Hi-Range Noble Gas Activity. The detector type is a Gieger-Mueller tube, uncompensated with a check source.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		CNTMT RAD
Point ID:		CHRADW_V
Plant Spec Point Desc:		Containment Radiation (WR)
Generic/Cond Desc:		Radiation Level In Containment
Analog/Digital:		A
Engr Units/Dig States:		R/Hr
Engr Units Conversion:		N/A
Minimum Instr Range:		1.0
Maximum Instr Range:		$1.0E^{+}8$
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Hi Select w/ 5 % Deviation limit
Sensor Locations:		Rx Bldg @ 25' & 64' El
Alarm/Trip Set Points:		Hi: 1.3E4 R/Hr Hi-Hi: 1.3E5 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:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		CNTMT RAD is the higher of 2 channel inputs (RAD6311A and RAD6311B). Both use ion chamber detectors. RAD6311A is located inside containment on the 25' level near the personnel hatch and RAD6311B is near the 64' level on the SG shield wall near the pressurizer ARMS channel R-2. These channels have 2 Hi Alarm setpoints, the first one activating an annunciator.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		RCS LTDN RAD
Point ID:		R20_A
Plant Spec Point Desc:		RCS Letdown Line Activity
Generic/Cond Desc:		Rad Level Of The RCS Letdown
Analog/Digital:		A
Engr Units/Dig States:		mR/Hr
Engr Units Conversion:		N/A
Minimum Instr Range:		1.0
Maximum Instr Range:		$1.0E^{+}5$
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		S
Number of Sensors:		1
How Processed:		N/A
Sensor Locations:		RCS letdown piping upstream of HX
Alarm/Trip Set Points:		Hi $5.0E^{+}4$ mR/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 Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		R-20 provides reactor coolant letdown line activity. The monitor is located on the letdown line, outside of containment and upstream of the non-regenerative heat exchanger. The monitor is external to the piping system and far enough from the coolant loop that a 40 second transient time is provided for N16 gamma decay. The detector is a Geiger-Mueller tube.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		N/L
Point ID:		R6426_A
Plant Spec Point Desc:		Main Stm Lines Gamma Hi Rng
Generic/Cond Desc:		Main Steam Lines Radioactivity
Analog/Digital:		A
Engr Units/Dig States:		uCi/cc
Engr Units Conversion:		N/A
Minimum Instr Range:		$1.0E^{-}1$
Maximum Instr Range:		$1.0E^{+}5$
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		1
How Processed:		Data Link
Sensor Locations:		Main Steam Sample lines
Alarm/Trip Set Points:		Determined By Plant Radiochemist
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		RAD6426-Main Steam Line High Range Gamma is measured by the Eberline DAM-1. Detector type is a Gieger-Mueller Tube with no compensation. Note: sample lines from all 6 SGs run simultaneously through the detector. To identify a ruptured SG, manual isolation valves must be operated.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		R19_A
Plant Spec Point Desc:		Stm Gen Liquid Sample Activity
Generic/Cond Desc:		SG Blowdown Radioactivity
Analog/Digital:		A
Engr Units/Dig States:		cpm
Engr Units Conversion:		N/A
Minimum Instr Range:		10
Maximum Instr Range:		$1.0E^{+}6$
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		S
Number of Sensors:		1
How Processed:		N/A
Sensor Locations:		Auxiliary Bldg N-S Hallway
Alarm/Trip Set Points:		Determined By Radiochemist
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		10
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		Detector type - Scintillation. Located in the combined SG sample line. R-19 provides for auto closure of all 3 (Unit 3) SG sample lines, all 3 blowdown flow control valves, and both (2) blowdown tank drain valves. High Alarm setpoint is determined by Radiochemist based on plant conditions.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		CTMNT PRESS
Point ID:		CAVPRSW_V
Plant Spec Point Desc:		Containment Pressure (WR)
Generic/Cond Desc:		Containment Pressure
Analog/Digital:		A
Engr Units/Dig States:		psig
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		180
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		South Penetration Room
Alarm/Trip Set Points:		Hi: 20 psig Hi-Hi: 55 psig
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		5 % Deviation check meaning the value at which point becomes Poor Quality. Containment pressure transmitters provide containment Hi and Hi-Hi actuation of the ESFAS circuitry at 4 psig and 20 psig respectively. Hi containment pressure actuates Safety Injection, while the Hi-Hi pressure coincident with the Hi pressure will actuate containment sprays and Phase B Containment Isolation.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		CTMNT TEMP
Point ID:		C_HITMP_V
Plant Spec Point Desc:		Containment Temperature
Generic/Cond Desc:		Containment Temperature
Analog/Digital:		A
Engr Units/Dig States:		°F
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		300
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		3
How Processed:		3 Input Hi Select
Sensor Locations:		Containment El 58' @ 120° Intervals
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:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		The containment temperature is the average of 3 channels (TE6700, TE6701, and TE6702). Each channel uses platinum RTD. TE6700 is located near the 3B Normal Containment Cooler, TE6701 is located near the 3C Normal Containment Cooler, TE6702 is located near the 3C Emergency Containment Filters. CHITMP_V provides an input to DEGCNTMT_V alarm @ 140 °F.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		H2 CONC
Point ID:		CH2CONC_V
Plant Spec Point Desc:		CTMT Hydrogen Concentration
Generic/Cond Desc:		Containment Atmosphere H^2 Conc
Analog/Digital:		A
Engr Units/Dig States:		% H^2
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:		P
Number of Sensors:		2
How Processed:		2 Input Hi Select w/ 5 % Deviation check
Sensor Locations:		Aux Bldg Basement
Alarm/Trip Set Points:		4%
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		AS-IS
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		Two channels of instrumentation are provided, the highest which is reported. A % H^2 signal is developed by comparing the thermal conductivity of a reference sample with the conductivity of a sample after removing any nitrogen. The system provides a high H^2 annunciator alarm at 7.5%, Low and Hi Cell Failure, Calibration Gas Low Pressure, Reagent Gas Low Pressure, and Low Analyzer Flow Alarm.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		RWST LEVEL
Point ID:		RWSTAVL_V
Plant Spec Point Desc:		RWST (Unit 3) Average Level
Generic/Cond Desc:		Borated Water Storage Tank Level
Analog/Digital:		A
Engr Units/Dig States:		gal
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		335,000 gals
Zero Point Reference:		TNKBOT
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		Ground Level by RWST
Alarm/Trip Set Points:		See Description
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		AS-IS
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		DRY
Unique System Desc:		5 % Deviation check meaning the value at which point becomes Poor Quality. Each RWST level loop consists of a Rosemount DP transmitter and Foxboro Modules to provide alarm and indication functions. Alarms provided are: Lo-Lo Level at 60,000 gallons, Low Level at 155,000 gallons, Tech Spec Min Level at 322,000 gallons and Hi Level at 333,000 gallons. Note: the RWST is the Borated Water Storage Tank.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		WIND SPEED
Point ID:		WS10M_LU_A
Plant Spec Point Desc:		10 Meter Wind Speed (T.P.)
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:		N/A
Sensor Locations:		10 Meter Tower 1 Mile SW of Plant
Alarm/Trip Set Points:		Hi: 75 mph Hi-Hi: 90 mph
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		0
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		Wind Speed meteorological data is gathered by instruments mounted on a 10 meter tower. The data (a 15 minute running average) is transmitted by radio to the plant and is received by the Campbell Scientific equipment located in the Plant Computer Room.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		WIND DIR
Point ID:		WD10M_LU_A
Plant Spec Point Desc:		10 Meter Wind Direction (T.P.)
Generic/Cond Desc:		Wind Direction At Reactor Site
Analog/Digital:		A
Engr Units/Dig States:		° (Degrees)
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		540
Zero Point Reference:		N/A
Reference Point Notes:		0 And 360 Are North. Switch Pt 180
PROC or SENS:		S
Number of Sensors:		1
How Processed:		N/A
Sensor Locations:		10 Meter Tower 1 Mile Sw Of Plant
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:		0
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		Wind direction is provided by instruments mounted on a 10 meter tower. The data (a 15 minute running average) is transmitted by radio to the plant and is received by the Campbell Scientific equipment located in the Computer Room. The 10 Meter Tower is located 1 mile SW of the site. Note: Wind is coming from direction reported by the instrument, with 0 and 360 being North.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		STABB CLASS
Point ID:		STABB_SD_A
Plant Spec Point Desc:		Estimate Of Atmos Stability
Generic/Cond Desc:		Air Stability At A Reactor Site
Analog/Digital:		A
Engr Units/Dig States:		df/mm
Engr Units Conversion:		N/A
Minimum Instr Range:		-5
Maximum Instr Range:		15
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		S
Number of Sensors:		1
How Processed:		N/A
Sensor Locations:		60 Meter Tower 7 Miles SSW Of Plant
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:		-5
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		Atmospheric stability is developed by taking the difference between the temperature at the 10 meter and 60 meters. The difference is multiplied by 2 to obtain the change per 100 meters altitude. A 15 minute running average data transmitted by radio telemetry to a Campbell Scientific receiver in the Plant Computer Room.

TP3 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP3
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		FAN3V21_A
Plant Spec Point Desc:		U3 SFP Exhaust Vent Flow
Generic/Cond Desc:		U3 Fuel Pool Exhaust Vent Flow
Analog/Digital:		D
Engr Units/Dig States:		N/A
Engr Units Conversion:		N/A
Minimum Instr Range:		ON
Maximum Instr Range:		OFF
Zero Point Reference:		N/A
Reference Point Notes:		Use With RAD6418-3 For Release Rate
PROC or SENS:		S
Number of Sensors:		1
How Processed:		N/A
Sensor Locations:		MCC-3C
Alarm/Trip Set Points:		Annunciator Alarm On Fan Trip
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		Off
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		Auxiliary contact of Brkr-30769-3 for Unit 3 Spent Fuel Pool Exhaust Fan used to indicate flow through spent fuel pool exhaust stack. See RAD6418-3. Note the flow will be about 18,500 cfm with the fan running.

ATTACHMENT 4

APPENDIX C

TURKEY POINT UNIT 4

ERDS DATA POINT LIBRARY

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		NI Power Rng
Point ID:		NIAVPRLVL-4
Plant Spec Point Desc:		Power Range Power Level
Generic/Cond Desc:		Nuclear Instr, Power Range
Analog/Digital:		A
Engr Units/Dig States:		%
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		120
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		4
How Processed:		4 Input Average, w/3 % Deviation Limit
Sensor Locations:		RX Vessel @ 45, 135, 225, & 315 degrees, 14'El
Alarm/Trip Set Points:		Hi: 103% Hi-Hi Rx Trip: 108%
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		3% deviation being the limit for use in calculation and Quality determination. The detector type is an excore dual ion chamber (upper-lower arrangement). Hi 103% (Rod Stop) Hi Hi 108% (RX Trip). This instrument also inputs a 2/4 logic for a Low Power – Hi Flux Rx Trip signal at 25% power.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		NI Inter Rng
Point ID:		NIAVIRLVL-4
Plant Spec Point Desc:		Intermediate Range Power Level
Generic/Cond Desc:		Nuclear Instr, Intermediate Range
Analog/Digital:		A
Engr Units/Dig States:		Amps
Engr Units Conversion:		N/A
Minimum Instr Range:		1.0E -11
Maximum Instr Range:		1.0E -3
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		Rx Vessel @ 90 & 270 Deg. 14' El
Alarm/Trip Set Points:		P6: 1.001 E -10 Amps
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		<1.0E -10 Amps
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		5 % Deviation check meaning the value at which point becomes Poor quality. The average is determined from N35_A and N36_A intermediate range channel signals. The detectors are compensated ion chambers located at the core. The P6 setpoint is 1.001 E -10 Amps. This instrument also inputs a 1/2 logic Low Power Rx trip signal at 1.2 E -4 amps (equiv to 25% power).

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		NI Source Rng
Point ID:		NIAVSRLVL-4
Plant Spec Point Desc:		Source Range Power Level
Generic/Cond Desc:		Nuclear Instr, Source Range
Analog/Digital:		A
Engr Units/Dig States:		cps
Engr Units Conversion:		N/A
Minimum Instr Range:		1.0E $^{+}$0
Maximum Instr Range:		1.0E $^{+}$6
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		Rx Vessel @ 90 & 270 Deg. 14' El.
Alarm/Trip Set Points:		Rx Trip at 1.0E5 cps
NI Detector Power Supply Cut-off Power Level:		>1.0E4 cps (P6 Permissive)
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		5 % Deviation check meaning the value at which point becomes Poor Quality. The average is determined from N31_A and N32_A source range channel signals. The detectors are in the lower half of detector wells shared with the intermediate range detectors.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		NI649AVPR-4
Plant Spec Point Desc:		Gammametrics PR Avg
Generic/Cond Desc:		Nuclear Instruments, Power Rng
Analog/Digital:		A
Engr Units/Dig States:		%
Engr Units Conversion:		N/A
Minimum Instr Range:		1.0E -8
Maximum Instr Range:		200
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P2
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		RX Vessel @ 0 and 180 Deg. 14' El
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:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		5 % Deviation check meaning the value at which point becomes Poor Quality. The Gammametrics Source Range Detectors are located in the same wells as the Gammametrics Power Range Detectors.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		NI649AVSR-4
Plant Spec Point Desc:		Gammametrics SR Avg
Generic/Cond Desc:		Nuclear Instruments, Source Rng
Analog/Digital:		A
Engr Units/Dig States:		cps
Engr Units Conversion:		N/A
Minimum Instr Range:		1.0E $^{-}$1
Maximum Instr Range:		1.0E $^{+}$5
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		RX Vessel @ 0 and 180 Deg. 14' El
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:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		5 % Deviation check meaning the value at which point becomes Poor Quality. The Gammametrics Source Range Detectors are located in the same detector wells as the Gammametrics Power Range Detectors.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		Reac Ves Lev
Point ID:		RXHDLVLLO-4
Plant Spec Point Desc:		Reactor Upper Head Level
Generic/Cond Desc:		Reactor Vessel Water Level
Analog/Digital:		A
Engr Units/Dig States:		%
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		100
Zero Point Reference:		TAF
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Low Select
Sensor Locations:		RX Vessel – Upper Head
Alarm/Trip Set Points:		Lo-Lo: 99.99%
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		Reactor head water level indication consists of the lower of 2 QSPDS Trains of the top 2 sensors (1 & 2) of an eight sensor probe. Each sensor consists of a heated and an unheated thermocouple pair. The probe extends from the top of the head to the top of the fuel alignment plate. Sensor 1 is at 179" (33% indicated) above the fuel and sensor 2 is 142" (0% indicated).

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		RXPLLVLLO-4
Plant Spec Point Desc:		Reactor Plenum Water Level
Generic/Cond Desc:		Reactor Vessel Plenum Water Level
Analog/Digital:		A
Engr Units/Dig States:		%
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		100
Zero Point Reference:		TAF
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Low Select
Sensor Locations:		Rx Vessel-Plenum Above Core
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:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		Reactor plenum water level indication consists of the lower of 2 QSPDS Trains of the lower 6 sensors (3-8) of an eight sensor probe. Each sensor consists of a heated and an unheated thermocouple pair. Sensor locations above the fuel from top to bottom (i.e., sensors 3-8) are 128", 98", 69", 55", 40", and 24" respectively. Indicated levels are 81%, 58%, 40%, 28%, 16%, and 0% respectively.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		Temp Core Ex
Point ID:		CET-4
Plant Spec Point Desc:		Core Exit Temperature
Generic/Cond Desc:		Highest Temp At Core Exit
Analog/Digital:		A
Engr Units/Dig States:		°F
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:		2
How Processed:		2 Input Hi Select
Sensor Locations:		Inside Reactor Vessel-Core Exit Area
Alarm/Trip Set Points:		Lo: 540°F Hi: 650°F
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		Signals originate from 2 QSPDS (Qualified Safety Parameter Display System) Channel Trains selecting the higher of 2 calculated representative core exit thermocouple (CET) temperatures. The representative CET temperature is the average of the highest eight valid CETs for that Train.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		Sub Margin
Point ID:		SMM1LO-4
Plant Spec Point Desc:		Subcooling
Generic/Cond Desc:		Sat Temp – Highest CET
Analog/Digital:		A
Engr Units/Dig States:		°F
Engr Units Conversion:		N/A
Minimum Instr Range:		- 2100
Maximum Instr Range:		700
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Low Select
Sensor Locations:		Core Exit Channels
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:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		Signals originate from 2 QSPDS (Qualified Safety Parameter Display System) Channel Trains selecting the lower of 2 calculated subcooled margins. The QSPDS subcooled margin calculation for each Train uses a Hi-select RCS loop temperature input as measured against saturation temperature for existing RCS pressure.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		RCSA-AVFLO-4
Plant Spec Point Desc:		RCS A Average Flow
Generic/Cond Desc:		RCS Loop A Coolant Flow
Analog/Digital:		A
Engr Units/Dig States:		%
Engr Units Conversion:		1% = 895 GPM
Minimum Instr Range:		0
Maximum Instr Range:		120
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		3
How Processed:		3 Input Average w/6 % Deviation Limit
Sensor Locations:		RCS Lower Loop Piping
Alarm/Trip Set Points:		Lo: 104% LoLo Rx Trip: 90%
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		No
Level Reference Leg:		N/A
Unique System Desc:		6% deviation (5370 gpm) being the limit for use in averaging calculation and for Quality determination. The flow is based on a differential pressure developed by a flow elbow located in the main coolant loop. 100% flow: ~ 89,500 GPM. Lo RCS Flow Rx Trip at ~90%. Minimum DNB flow: 104%.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		RCSB-AVFLO-4
Plant Spec Point Desc:		RCS B Average Flow
Generic/Cond Desc:		RCS Loop B Coolant Flow
Analog/Digital:		A
Engr Units/Dig States:		%
Engr Units Conversion:		1% = 895 GPM
Minimum Instr Range:		0
Maximum Instr Range:		120
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		3
How Processed:		3 Input Average w/6 % Deviation Limit
Sensor Locations:		RCS Lower Loop Piping
Alarm/Trip Set Points:		Lo: 104% LoLo Rx Trip: 90%
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		NO
Level Reference Leg:		N/A
Unique System Desc:		6% deviation (5370 gpm) being the limit for use in averaging calculation and for Quality determination. The flow is based on a differential pressure developed by a flow elbow located in the main coolant loop. 100% flow: ~ 89,500 GPM. Lo RCS Flow Rx Trip at ~90%. Minimum DNB flow: 104%.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		RCSC-AVFLO-4
Plant Spec Point Desc:		RCS C Average Flow
Generic/Cond Desc:		RCS Loop C Coolant Flow
Analog/Digital:		A
Engr Units/Dig States:		%
Engr Units Conversion:		1% = 895 GPM
Minimum Instr Range:		0
Maximum Instr Range:		120
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		3
How Processed:		3 Input Average w/6 % Deviation Limit
Sensor Locations:		RCS Lower Loop Piping
Alarm/Trip Set Points:		Lo: 104% LoLo Rx Trip: 90%
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		NO
Level Reference Leg:		N/A
Unique System Desc:		6% deviation (5370 gpm) being the limit for use in averaging calculation and for Quality determination. The flow is based on a differential pressure developed by a flow elbow located in the main coolant loop. 100% flow: ~ 89,500 GPM. Lo RCS Flow Rx Trip at ~90%. Minimum DNB flow: 104%.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		SG LEVEL 1/A
Point ID:		SGA-AVLVL-4
Plant Spec Point Desc:		Steam Generator Level A
Generic/Cond Desc:		Steam Generator A Water Level
Analog/Digital:		A
Engr Units/Dig States:		%
Engr Units Conversion:		1% = 112.5 gallons
Minimum Instr Range:		0
Maximum Instr Range:		100
Zero Point Reference:		U-Tubes
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		3
How Processed:		3 Input Average w/10% Deviation Limit
Sensor Locations:		SG Vessel A 30' 6" EL
Alarm/Trip Set Points:		Lo-Lo Rx Trip: 10% Lo: 35% Hi 68% Hi-Hi: 80%
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		NO
Level Reference Leg:		WET
Unique System Desc:		10 % deviation being the limit for use in calculation and quality determination. 0% = 16,250 gal 100% = 27,500 gal The lower tap is 8" above the top of the tube bundle. Protection Train: 10 % Reactor Trip, 80 % Turbine Trip

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		LT477-4
Plant Spec Point Desc:		Steam Generator A Wide Rng Level
Generic/Cond Desc:		Steam Generator A WR Water Level
Analog/Digital:		A
Engr Units/Dig States:		%
Engr Units Conversion:		See Description
Minimum Instr Range:		0
Maximum Instr Range:		100
Zero Point Reference:		Tubesheet
Reference Point Notes:		N/A
PROC or SENS:		S
Number of Sensors:		1
How Processed:		N/A
Sensor Locations:		Containment 30' 6" El
Alarm/Trip Set Points:		Lo: 40% Hi: 93%
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		No
Level Reference Leg:		WET
Unique System Desc:		0% = 750 gal 100% = 27,500 gal Percent to gal conversion is: 0-52 %: 187 gal / % 52-73 %: 274 gal / % 73-100 %: 417 gal / %

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		SG LEVEL 2/B
Point ID:		SGB-AVLVL-4
Plant Spec Point Desc:		Steam Generator Level B
Generic/Cond Desc:		Steam Generator B Water Level
Analog/Digital:		A
Engr Units/Dig States:		%
Engr Units Conversion:		1% = 112.5 gallons
Minimum Instr Range:		0
Maximum Instr Range:		100
Zero Point Reference:		U-Tubes
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		3
How Processed:		3 Input Average w/10% Deviation Limit
Sensor Locations:		SG Vessel B 30' 6" EL
Alarm/Trip Set Points:		Lo-Lo Rx Trip: 10% Lo: 35% Hi 68% Hi-Hi: 80%
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		No
Level Reference Leg:		Wet
Unique System Desc:		10 % deviation being the limit for use in calculation and quality determination. 0% = 16,250 gal 100% = 27,500 gal The lower tap is 8" above the top of the tube bundle. Protection Train: 10 % Reactor Trip, 80 % Turbine Trip.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		LT487-4
Plant Spec Point Desc:		Steam Generator B Wide Rng Level
Generic/Cond Desc:		Steam Generator B WR Water Level
Analog/Digital:		A
Engr Units/Dig States:		%
Engr Units Conversion:		See Description
Minimum Instr Range:		0
Maximum Instr Range:		100
Zero Point Reference:		Tubesheet
Reference Point Notes:		N/A
PROC or SENS:		S
Number of Sensors:		1
How Processed:		N/A
Sensor Locations:		Containment 30' 6" El
Alarm/Trip Set Points:		Lo: 40% Hi: 93%
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		No
Level Reference Leg:		WET
Unique System Desc:		0% = 750 gal 100% = 27,500 gal Percent to gal conversion is: 0-52 %: 187 gal / % 52-73 %: 274 gal / % 73-100 %: 417 gal / %

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		SG LEVEL 3/C
Point ID:		SGC-AVLVL-4
Plant Spec Point Desc:		Steam Generator Level C
Generic/Cond Desc:		Steam Generator C Water Level
Analog/Digital:		A
Engr Units/Dig States:		%
Engr Units Conversion:		1% = 112.5 gallons
Minimum Instr Range:		0
Maximum Instr Range:		100
Zero Point Reference:		U-Tubes
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		3
How Processed:		3 Input Average w/10% Deviation Limit
Sensor Locations:		SG Vessel C 30' 6" EL
Alarm/Trip Set Points:		Lo-Lo Rx Trip: 10% Lo: 35% Hi 68% Hi-Hi: 80%
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		No
Level Reference Leg:		Wet
Unique System Desc:		10 % deviation being the limit for use in calculation and quality determination. 0% = 16,250 gal 100% = 27,500 gal The lower tap is 8" above the top of the tube bundle. Protection Train: 10 % Reactor Trip, 80 % Turbine Trip.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		LT497-4
Plant Spec Point Desc:		Steam Generator C Wide Rng Level
Generic/Cond Desc:		Steam Generator C WR Water Level
Analog/Digital:		A
Engr Units/Dig States:		%
Engr Units Conversion:		See Description
Minimum Instr Range:		0
Maximum Instr Range:		100
Zero Point Reference:		Tubesheet
Reference Point Notes:		N/A
PROC or SENS:		S
Number of Sensors:		1
How Processed:		N/A
Sensor Locations:		Containment 30' 6" El
Alarm/Trip Set Points:		Lo: 40% Hi: 93%
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		No
Level Reference Leg:		WET
Unique System Desc:		0% = 750 gal 100% = 27,500 gal Percent to gal conversion is: 0-52 %: 187 gal / % 52-73 %: 274 gal / % 73-100 %: 417 gal / %

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		SG PRESS 1/A
Point ID:		SGA-AVPRES-4
Plant Spec Point Desc:		Steam Generator Pressure A
Generic/Cond Desc:		Steam Generator A Pressure
Analog/Digital:		A
Engr Units/Dig States:		psig
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		1400
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		3
How Processed:		3 Input Average w/25 psig Deviation limit
Sensor Locations:		SG A Steam Line before MSIV
Alarm/Trip Set Points:		Lo: 614 psig Hi: 1085 psig
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		25 psig deviation being the limit for use in calculation and for Quality determination. ESF actuation signals: SG pressure 100 psig < steam header pressure SG pressure of < 614 psig

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		SG PRESS 2/B
Point ID:		SGB-AVPRES-4
Plant Spec Point Desc:		Steam Generator Pressure B
Generic/Cond Desc:		Steam Generator B Pressure
Analog/Digital:		A
Engr Units/Dig States:		psig
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		1400
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		3
How Processed:		3 Input Average w/25 psig Deviation limit
Sensor Locations:		SG B Steam Line before MSIV
Alarm/Trip Set Points:		Lo: 614 psig Hi: 1085 psig
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		25 psig deviation being the limit for use in calculation and for Quality determination. ESF actuation signals: SG pressure 100 psig < steam header pressure SG pressure of < 614 psig

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		SG PRESS 3/C
Point ID:		SGC-AVPRES-4
Plant Spec Point Desc:		Steam Generator Pressure C
Generic/Cond Desc:		Steam Generator C Pressure
Analog/Digital:		A
Engr Units/Dig States:		psig
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		1400
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		3
How Processed:		3 Input Average w/25 psig Deviation limit
Sensor Locations:		SG C Steam Line before MSIV
Alarm/Trip Set Points:		Lo: 614 psig Hi: 1085 psig
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		N/A
Temperature Compensation For DP Transmitters		As-Is
Level Reference Leg:		N/A
Unique System Desc:		25 psig deviation being the limit for use in calculation and for Quality determination. ESF actuation signals: SG pressure 100 psig < steam header pressure SG pressure of < 614 psig

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		MN FD FL 1/A
Point ID:		SGAAVFWFLO-4
Plant Spec Point Desc:		Feedwater Flow A SG
Generic/Cond Desc:		Steam Generator A Mn Feedwater Fl
Analog/Digital:		A
Engr Units/Dig States:		lb/Hr
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		4.0E $^{+}$6
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		Upstream FW Regulating Valve
Alarm/Trip Set Points:		See Description
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		No
Level Reference Leg:		N/A
Unique System Desc:		5 % Deviation check meaning the value at which point becomes poor quality. Protection Train instrumentation has 2 separate channels of input to a reactor trip signal when: Feedwater flow < Steam Flow @ 640,000 lb/Hr coincident SG level of ~10% Feedwater < Steam Flow alarm @ 500,000 lb/Hr

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		MN FD FL 2/B
Point ID:		SGBAVFWFLO-4
Plant Spec Point Desc:		Feedwater Flow B SG
Generic/Cond Desc:		Steam Generator B Mn Feedwater Fl
Analog/Digital:		A
Engr Units/Dig States:		lb/Hr
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		4.0E +6
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		Upstream FW Regulating Valve
Alarm/Trip Set Points:		See Description
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		NO
Level Reference Leg:		N/A
Unique System Desc:		5 % Deviation check meaning the value at which point becomes poor quality. Protection Train instrumentation has 2 separate channels of input to a reactor trip signal when: Feedwater flow < Steam Flow @ 640,000 lb/Hr coincident SG level of ~10% Feedwater < Steam Flow alarm @ 500,000 lb/Hr

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		MN FD FL 3/C
Point ID:		SGCAVFWFLO-4
Plant Spec Point Desc:		Feedwater Flow C SG
Generic/Cond Desc:		Steam Generator C Mn Feedwater Fl
Analog/Digital:		A
Engr Units/Dig States:		lb/Hr
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		4.0E +6
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		Upstream FW Regulating Valve
Alarm/Trip Set Points:		See Description
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		No
Level Reference Leg:		N/A
Unique System Desc:		5 % Deviation check meaning the value at which point becomes poor quality. Protection Train instrumentation has 2 separate channels of input to a reactor trip signal when: Feedwater flow < Steam Flow @ 640,000 lb/Hr coincident SG level of ~10% Feedwater < Steam Flow alarm @ 500,000 lb/Hr

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		AX FD FL 1/A
Point ID:		SGAAFWFLO-4
Plant Spec Point Desc:		Aux Feedwater Flow A SG
Generic/Cond Desc:		Steam Generator A Aux FW Flow
Analog/Digital:		A
Engr Units/Dig States:		gpm
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:		2
How Processed:		2 Input Sum
Sensor Locations:		Aux FW lines
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:		As-Is
Temperature Compensation For DP Transmitters		NO
Level Reference Leg:		N/A
Unique System Desc:		Total AFW flow is the sum of Train One and Train Two to each SG. The aux feed is supplied by 3 steam driven pumps which discharge to 2 redundant trains. Each train supplies flow to both Units and may feed any of the SGs. Administratively, pump A is aligned to Train One and pumps B and C to Train Two. The 2 condensate storage tanks are the normal water supplies to the AFW pumps.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		AX FD FL 2/B
Point ID:		SGBAFWFLO-4
Plant Spec Point Desc:		Aux Feedwater Flow B SG
Generic/Cond Desc:		Steam Generator B Aux FW Flow
Analog/Digital:		A
Engr Units/Dig States:		gpm
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:		2
How Processed:		2 Input Sum
Sensor Locations:		Aux FW lines
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:		As-Is
Temperature Compensation For DP Transmitters		NO
Level Reference Leg:		N/A
Unique System Desc:		Total AFW flow is the sum of Train One and Train Two to each SG. The aux feed is supplied by 3 steam driven pumps which discharge to 2 redundant trains. Each train supplies flow to both Units and may feed any of the SGs. Administratively, pump A is aligned to Train One and pumps B and C to Train Two. The 2 condensate storage tanks are the normal water supplies to the AFW pumps.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		AX FD FL 3/C
Point ID:		SGCAFWFLO-4
Plant Spec Point Desc:		Aux Feedwater Flow C SG
Generic/Cond Desc:		Steam Generator C Aux FW Flow
Analog/Digital:		A
Engr Units/Dig States:		gpm
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:		2
How Processed:		2 Input Sum
Sensor Locations:		Aux FW lines
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:		As-Is
Temperature Compensation For DP Transmitters		No
Level Reference Leg:		N/A
Unique System Desc:		Total AFW flow is the sum of Train One and Train Two to each SG. The aux feed is supplied by 3 steam driven pumps which discharge to 2 redundant trains. Each train supplies flow to both Units and may feed any of the SGs. Administratively, pump A is aligned to Train One and pumps B and C to Train Two. The 2 condensate storage tanks are the normal water supplies to the AFW pumps.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		HL TEMP 1/A
Point ID:		THA-AVTEMP-4
Plant Spec Point Desc:		RCS Hot Leg A Avg Temp
Generic/Cond Desc:		Steam Generator A Inlet Temp
Analog/Digital:		A
Engr Units/Dig States:		°F
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		750
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		RCS Hot Leg A Piping 14' El
Alarm/Trip Set Points:		Lo: 540°F Hi: 610°F
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		5 % Deviation check meaning the value at which point becomes Poor Quality. The sensors are platinum RTDs which are located in wells in the main coolant loops. The loop T-Hot signals are also inputs to the Qualified Safety Parameter Display System.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		HL TEMP 2/B
Point ID:		THB-AVTEMP-4
Plant Spec Point Desc:		RCS Hot Leg B Avg Temp
Generic/Cond Desc:		Steam Generator B Inlet Temp
Analog/Digital:		A
Engr Units/Dig States:		°F
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		750
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		RCS Hot Leg B Piping 14' El
Alarm/Trip Set Points:		Lo: 540°F Hi: 610°F
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		5 % Deviation check meaning the value at which point becomes Poor Quality. The sensors are platinum RTDs which are located in wells in the main coolant loops. The loop T-Hot signals are also inputs to the Qualified Safety Parameter Display System.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		HL TEMP 3/C
Point ID:		THC-AVTEMP-4
Plant Spec Point Desc:		RCS Hot Leg C Avg Temp
Generic/Cond Desc:		Steam Generator C Inlet Temp
Analog/Digital:		A
Engr Units/Dig States:		°F
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		750
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		RCS Hot Leg C Piping 14' El
Alarm/Trip Set Points:		Lo: 540°F Hi: 610°F
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		5 % Deviation check meaning the value at which point becomes Poor Quality. The sensors are platinum RTDs which are located in wells in the main coolant loops. The loop T-Hot signals are also inputs to the Qualified Safety Parameter Display System.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		CL TEMP 1/A
Point ID:		TCA-AVTEMP-4
Plant Spec Point Desc:		RCS Cold Leg A Avg Temp
Generic/Cond Desc:		Steam Generator A Outlet Temp
Analog/Digital:		A
Engr Units/Dig States:		°F
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		750
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		RCS Cold Leg A Piping 14' El
Alarm/Trip Set Points:		Lo: 540°F H: 555°F
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		5 % Deviation check meaning the value at which point becomes Poor Quality. The sensors are platinum RTDs which are located in wells in the main coolant loops. The loop T-Cold signals are also inputs to the Qualified Safety Parameter Display System.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		CL TEMP 2/B
Point ID:		TCB-AVTEMP-4
Plant Spec Point Desc:		RCS Cold Leg B Avg Temp
Generic/Cond Desc:		Steam Generator B Outlet Temp
Analog/Digital:		A
Engr Units/Dig States:		°F
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		750
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		RCS Cold Leg B Piping 14' El
Alarm/Trip Set Points:		Lo: 540°F Hi: 555°F
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		5 % Deviation check meaning the value at which point becomes Poor Quality. The sensors are platinum RTDs which are located in wells in the main coolant loops. The loop T-Cold signals are also inputs to the Qualified Safety Parameter Display System.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		CL TEMP 3/C
Point ID:		TCC-AVTEMP-4
Plant Spec Point Desc:		RCS Cold Leg C Avg Temp
Generic/Cond Desc:		Steam Generator C Outlet Temp
Analog/Digital:		A
Engr Units/Dig States:		°F
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		750
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		RCS Cold Leg C Piping 14' El
Alarm/Trip Set Points:		Lo: 540°F H: 555°F
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		5 % Deviation check meaning the value at which point becomes Poor Quality. The sensors are platinum RTDs which are located in wells in the main coolant loops. The loop T-Cold signals are also inputs to the Qualified Safety Parameter Display System.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		RCS PRESSURE
Point ID:		RCSAVPRES-4
Plant Spec Point Desc:		RCS Pressure WR
Generic/Cond Desc:		Reactor Coolant System Pressure
Analog/Digital:		A
Engr Units/Dig States:		psig
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		3000
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		RCS Loop A & B Hot Legs 14' El
Alarm/Trip Set Points:		Lo: 1910 psig Hi: 2310 psig
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		RCS pressure is the average of 2 inputs (P404 & P406). 5 % Deviation check meaning the value at which point becomes Poor Quality.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		PRZR LEVEL
Point ID:		PRZ-AVLVL-4
Plant Spec Point Desc:		Pressurizer Average Level
Generic/Cond Desc:		Primary System Pressurizer Level
Analog/Digital:		A
Engr Units/Dig States:		%
Engr Units Conversion:		1% = 84.5 gallons
Minimum Instr Range:		0
Maximum Instr Range:		100
Zero Point Reference:		Complx
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		3
How Processed:		3 Input Average
Sensor Locations:		PRZ Vessel 30' El
Alarm/Trip Set Points:		Lo: 14% Hi: 92%
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		No
Level Reference Leg:		Wet
Unique System Desc:		The pressurizer average level is calculated using 5 minute rolling averages of 3 redundant sensors. The instrument range of 0-100% is equivalent to 600-9050 gallons. Protection Channel inputs include: PZR Hi-Level Rx trip (2/3 at 91%), Lo-Lo level alarm at 6%, PZR heaters Off and letdown isolate at 14.4%, Hi level alarm and heaters on at +5% program, and Lo level alarm at -5% program.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		RCS CHG/MU
Point ID:		FT122-4
Plant Spec Point Desc:		Charging Flow
Generic/Cond Desc:		Primary System Charging/MU Flow
Analog/Digital:		A
Engr Units/Dig States:		gpm
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		150
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		S
Number of Sensors:		1
How Processed:		N/A
Sensor Locations:		Charging Pumps Discharge Header
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 Transmitters		No
Level Reference Leg:		N/A
Unique System Desc:		Charging flow is provided by 3 electrically driven positive displacement pumps. The discharge is to a common header (where the flow is measured) and provides cooled RCP seal water flow and re-heated flow that can be directed to loops A cold leg, C hot leg, or to the pressurizer auxiliary spray line. Charging flow rate is normally controlled by pressurizer level.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		FT932-4
Plant Spec Point Desc:		HHSI Flo A HL Inside Containment
Generic/Cond Desc:		High Press SI Flow To HL A
Analog/Digital:		A
Engr Units/Dig States:		gpm
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:		S
Number of Sensors:		1
How Processed:		N/A
Sensor Locations:		On SI line to Hot Leg A 14' El
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 Transmitters		No
Level Reference Leg:		N/A
Unique System Desc:		FT-932 measures HHSI flow to the loop A hot leg. HHSI is provided by 2 electrically driven pumps. The water supply is the Unit 3 RWST. The discharge of each pump is directed to a common discharge header to the A and/or B hot legs. Note: The Unit 3 & 4 RWSTs may be cross-connected and Unit 3 & 4 HHSI pumps discharge headers may be cross-connected.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		FT933-4
Plant Spec Point Desc:		HHSI Flo B HL Inside Containment
Generic/Cond Desc:		High Press SI Flow To HL B
Analog/Digital:		A
Engr Units/Dig States:		gpm
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:		S
Number of Sensors:		1
How Processed:		N/A
Sensor Locations:		On SI line to Hot Leg B 14' El
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 Transmitters		No
Level Reference Leg:		N/A
Unique System Desc:		FT-933 measures HHSI flow to loop A and/or B hot legs. HHSI is provided by 2 electrically driven pumps. The water supply is the Unit 3 RWST. The discharge of each pump is directed to a common discharge header to the A and/or B hot legs. Note: The Unit 3 & 4 RWSTs may be cross-connected and Unit 3 & 4 HHSI pumps discharge headers may be cross-connected.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		HPSI FLOW
Point ID:		FT943-4
Plant Spec Point Desc:		HHSI Flo To BIT To Cold Legs
Generic/Cond Desc:		High Press SI Flow To Cold Legs
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:		S
Number of Sensors:		1
How Processed:		N/A
Sensor Locations:		SI line upstream of Discharge Header MOVs
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 Transmitters		No
Level Reference Leg:		N/A
Unique System Desc:		FT-943 measures total HHSI flow to loops A, B, and C cold legs. HHSI is provided by 2 electrically driven pumps. The water supply is the Unit 3 RWST. The discharge of each pump is directed to a common discharge header to the 3 cold legs. Note: The Unit 3 & 4 RWSTs may be cross-connected and Unit 3 & 4 HHSI pumps discharge headers may be cross-connected.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		LP SI FLOW
Point ID:		FT605-4
Plant Spec Point Desc:		RHR System Flow
Generic/Cond Desc:		Lo Pressure SI Flow
Analog/Digital:		A
Engr Units/Dig States:		gpm
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		8500
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		S
Number of Sensors:		1
How Processed:		N/A
Sensor Locations:		RHR/SI Header to Cold Legs (in RHR HX Room)
Alarm/Trip Set Points:		Hi: 7000 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 Transmitters		No
Level Reference Leg:		N/A
Unique System Desc:		FT-605 measures the Residual Heat Removal (RHR) flow. RHR is provided by 2 RHR pumps. Each pump discharges to its own associated heat exchanger. Flow from the heat exchangers are combined into a single header for penetration into containment. Flow in this header is measured by FT-605, flow is then directed to loops A, B, and C cold legs. This flow signal also actuates a low flow alarm annunciator at 3000 gpm.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		CTMNT SMP NR
Point ID:		CTMTHILVLL-4
Plant Spec Point Desc:		CNTMT LR Sump Water Level
Generic/Cond Desc:		Containment Sump Lo-Range Level
Analog/Digital:		A
Engr Units/Dig States:		Inches
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		369
Zero Point Reference:		-18' 8" El
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Hi Select w/ 5% Deviation check
Sensor Locations:		Containment 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:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		Containment sump level is the highest of the two sump level channels. Each channel consists of 5 segment, float and reed switch level column. The level column starts at the -18'8" elevation (i.e., below sea level) and covers 30'9" of level. The conversion from inches to gallons is non-linear. Note: The elevation between 12' and 14'3" is not covered by the containment sump or containment level transmitters.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		CTMNT SMP WR
Point ID:		CTMTHILVLH-4
Plant Spec Point Desc:		CNTMT HR Water Level
Generic/Cond Desc:		Containment Sump Hi-Range Level
Analog/Digital:		A
Engr Units/Dig States:		Inches
Engr Units Conversion:		N/A
Minimum Instr Range:		397
Maximum Instr Range:		487.5
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Hi Select
Sensor Locations:		Containment Floor 14' El & Above
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:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		Containment level is the highest of the 2 containment level channels. Each channel consists of a float and reed switch level column. The level column starts at the 14'3" elevation and covers 7'6" of level. The conversion from inches to gallons is non-linear. Note: The elevation between 12' and 14'3" is not covered by the containment sump or containment level transmitters.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		R14-4
Plant Spec Point Desc:		Plant Vent Gas Activity
Generic/Cond Desc:		Radioactivity Of A Released Gas
Analog/Digital:		A
Engr Units/Dig States:		cpm
Engr Units Conversion:		N/A
Minimum Instr Range:		10
Maximum Instr Range:		1E6
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		S
Number of Sensors:		1
How Processed:		N/A
Sensor Locations:		Top Of Plant Vent Stack
Alarm/Trip Set Points:		Determined By Radiochemist
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:		R-14 is installed inside the plant vent. It consists of 4 thin-walled Gieger-Mueller tube detectors arranged across the plant vent stack diameter. The 4 detectors operate in parallel, are Beta-Gamma sensitive in the range of 5E-7 to 1E-4 Ci/cc, and have a check source. R-14 alarm will automatically close the Gas Decay Tank discharge valve upon actuation. Note: cpm to uCi/cc conversion factor is 2E8 ml/cc at sample flow rate.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		EFF GAS RAD
Point ID:		RAD6304HR-4
Plant Spec Point Desc:		Plant Vent Gas Gamma Hi Range
Generic/Cond Desc:		Radioactivity Of Released Gases
Analog/Digital:		A
Engr Units/Dig States:		uCi/cc
Engr Units Conversion:		N/A
Minimum Instr Range:		1.0E-1
Maximum Instr Range:		1.0E5
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		1
How Processed:		Data Link
Sensor Locations:		Auxiliary Building
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:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		An Eberline SPING Unit provides Plant Vent High Range Noble Gas Activity. The detector type is a Geiger-Mueller tube, uncompensated with a check source. The plant vent stack is the normal discharge path for: Unit 3 & 4 containment purge, auxiliary building exhaust and Unit 4 SFP. Note: Unit 3 SFP exhaust is through a dedicated stack.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		RAD6304FLO-4
Plant Spec Point Desc:		Plant Vent Flow Rate
Generic/Cond Desc:		Plant Vent Stack Flow Rate
Analog/Digital:		A
Engr Units/Dig States:		cfm
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		$1.5E^{+}5$
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		1
How Processed:		Data Link
Sensor Locations:		Plant Vent Stack Near Top
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:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		Plant vent flow is provided by transmitter FT-6584 which measures the differential pressure across a flow orifice installed in the plant vent stack. The signal is processed by an optional analog to digital channel (#10) on the Plant Vent SPING unit. Note: Loss of plant vent flow channel will not affect the calibration of the plant vent high range gas monitor which is based on a fixed sample flow rate.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		EFF LIQ RAD
Point ID:		R18-4
Plant Spec Point Desc:		Liquid Release Gross Activity
Generic/Cond Desc:		Radioactivity Of Released Liquid
Analog/Digital:		A
Engr Units/Dig States:		cpm
Engr Units Conversion:		N/A
Minimum Instr Range:		10
Maximum Instr Range:		$1.0E^{+}6$
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		S
Number of Sensors:		1
How Processed:		N/A
Sensor Locations:		Liquid Release Line In Aux Bldg
Alarm/Trip Set Points:		Determined By Radiochemist
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:		R-18 monitors liquid waste release activity in the waste discharge header upstream of the liquid release isolation valve RCV-018. The detector is a sodium iodide scintillation tube, lead shielded against background. The alarm setpoint is plant condition dependent and set by the Radiochemist. The liquid waste control valve (RCV-18) auto isolates on a high activity alarm. Note: the cpm to uci/cc conversion factor is 2.96E7 ml-cpm at 100 gpm.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		R15-4
Plant Spec Point Desc:		Condenser Air Ejector (PRMS)
Generic/Cond Desc:		Condenser Air Ejector Rad
Analog/Digital:		A
Engr Units/Dig States:		cpm
Engr Units Conversion:		N/A
Minimum Instr Range:		10
Maximum Instr Range:		$1.0E^{+}6$
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 DECK
Alarm/Trip Set Points:		DETERMINED BY RADIOCHEMIST
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:		R-15, the Condenser Air Ejector Monitor uses a thin wall Geiger-Mueller tube detector. The detector is located in the air ejector exhaust manifold and uses lead shielding against background. The alarm setpoint is plant condition dependent and is determined by the Radiochemist.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		COND A/E RAD
Point ID:		RAD6417HR-4
Plant Spec Point Desc:		Air Ejector Gas Gamma Hi-Rng
Generic/Cond Desc:		Condenser Air Ejector Rad
Analog/Digital:		A
Engr Units/Dig States:		uCi/cc
Engr Units Conversion:		N/A
Minimum Instr Range:		$1.0E^{-}1$
Maximum Instr Range:		$1.0E^{+}5$
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		1
How Processed:		Data Link
Sensor Locations:		Turbine Deck
Alarm/Trip Set Points:		Determined By Radiochemist
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		M/A
Unique System Desc:		An Eberline SPING Unit provides the Air Ejector Plant Vent Hi-Range Noble Gas Activity. The detector type is a Gieger-Mueller tube, uncompensated with a check source.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		CNTMT RAD
Point ID:		CTMHRADW-4
Plant Spec Point Desc:		Containment Radiation (WR)
Generic/Cond Desc:		Radiation Level In Containment
Analog/Digital:		A
Engr Units/Dig States:		R/Hr
Engr Units Conversion:		N/A
Minimum Instr Range:		1.0
Maximum Instr Range:		$1.0E^{+}8$
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Hi Select w/ 5 % Deviation limit
Sensor Locations:		Rx Bldg @ 25' & 64' El
Alarm/Trip Set Points:		Hi: 1.3E4 R/Hr Hi-Hi: 1.3E5 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:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		CNTMT RAD is the higher of 2 channel inputs (RAD6311A and RAD6311B). Both use ion chamber detectors. RAD6311A is located inside containment on the 25' level near the personnel hatch and RAD6311B is near the 64' level on the SG shield wall near the pressurizer ARMS channel R-2. These channels have 2 Hi Alarm setpoints, the first one activating an annunciator.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		RCS LTDN RAD
Point ID:		R20-4
Plant Spec Point Desc:		RCS Letdown Line Activity
Generic/Cond Desc:		Rad Level Of The RCS Letdown
Analog/Digital:		A
Engr Units/Dig States:		mR/Hr
Engr Units Conversion:		N/A
Minimum Instr Range:		1.0
Maximum Instr Range:		$1.0E^{+}5$
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		S
Number of Sensors:		1
How Processed:		N/A
Sensor Locations:		RCS letdown piping upstream of HX
Alarm/Trip Set Points:		Hi $5.0E^{+}4$ mR/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 Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		R-20 provides reactor coolant letdown line activity. The monitor is located on the letdown line, outside of containment and upstream of the non-regenerative heat exchanger. The monitor is external to the piping system and far enough from the coolant loop that a 40 second transient time is provided for N16 gamma decay. The detector is a Geiger-Mueller tube.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		N/L
Point ID:		RAD6426-4
Plant Spec Point Desc:		Main Stm Lines Gamma Hi Rng
Generic/Cond Desc:		Main Steam Lines Radioactivity
Analog/Digital:		A
Engr Units/Dig States:		uCi/cc
Engr Units Conversion:		N/A
Minimum Instr Range:		$1.0E^{-}1$
Maximum Instr Range:		$1.0E^{+}5$
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		1
How Processed:		Data Link
Sensor Locations:		Main Steam Sample lines
Alarm/Trip Set Points:		Determined By Plant Radiochemist
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		RAD6426-Main Steam Line High Range Gamma is measured by the Eberline DAM-1. Detector type is a Gieger-Mueller Tube with no compensation. Note: sample lines from all 6 SGs run simultaneously through the detector. To identify a ruptured SG, manual isolation valves must be operated.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		NL
Point ID:		R19-4
Plant Spec Point Desc:		Stm Gen Liquid Sample Activity
Generic/Cond Desc:		SG Blowdown Radioactivity
Analog/Digital:		A
Engr Units/Dig States:		cpm
Engr Units Conversion:		N/A
Minimum Instr Range:		10
Maximum Instr Range:		$1.0E^{+}6$
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		S
Number of Sensors:		1
How Processed:		N/A
Sensor Locations:		Auxiliary Bldg N-S Hallway
Alarm/Trip Set Points:		Determined By Radiochemist
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		10
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		Detector type - Scintillation. Located in the combined SG sample line. R-19 provides for auto closure of all 3 (Unit 3) SG sample lines, all 3 blowdown flow control valves, and both (2) blowdown tank drain valves. High Alarm setpoint is determined by Radiochemist based on plant conditions.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		CTMNT PRESS
Point ID:		CTMTAVPRSW-4
Plant Spec Point Desc:		Containment Pressure (WR)
Generic/Cond Desc:		Containment Pressure
Analog/Digital:		A
Engr Units/Dig States:		psig
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		180
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		South Penetration Room
Alarm/Trip Set Points:		Hi: 20 psig Hi-Hi: 55 psig
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		5 % Deviation check meaning the value at which point becomes Poor Quality. Containment pressure transmitters provide containment Hi and Hi-Hi actuation of the ESFAS circuitry at 4 psig and 20 psig respectively. Hi containment pressure actuates Safety Injection, while the Hi-Hi pressure coincident with the Hi pressure will actuate containment sprays and Phase B Containment Isolation.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		CTMNT TEMP
Point ID:		CTMTHITMP-4
Plant Spec Point Desc:		Containment Temperature
Generic/Cond Desc:		Containment Temperature
Analog/Digital:		A
Engr Units/Dig States:		°F
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		300
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		3
How Processed:		3 Input Hi Select
Sensor Locations:		Containment El 58' @ 120° Intervals
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:		As-Is
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		The containment temperature is the average of 3 channels (TE6700, TE6701, and TE6702). Each channel uses platinum RTD. TE6700 is located near the 3B Normal Containment Cooler, TE6701 is located near the 3C Normal Containment Cooler, TE6702 is located near the 3C Emergency Containment Filters.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		H2 CONC
Point ID:		CTMTH2CONC-4
Plant Spec Point Desc:		CTMT Hydrogen Concentration
Generic/Cond Desc:		Containment Atmosphere H^2 Conc
Analog/Digital:		A
Engr Units/Dig States:		% H^2
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:		P
Number of Sensors:		2
How Processed:		2 Input Hi Select w/ 5 % Deviation check
Sensor Locations:		Aux Bldg Basement
Alarm/Trip Set Points:		4%
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		AS-IS
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		Two channels of instrumentation are provided, the highest which is reported. A % H^2 signal is developed by comparing the thermal conductivity of a reference sample with the conductivity of a sample after removing any nitrogen. The system provides a high H^2 annunciator alarm at 7.5%, Low and Hi Cell Failure, Calibration Gas Low Pressure, Reagent Gas Low Pressure, and Low Analyzer Flow Alarm.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		RWST LEVEL
Point ID:		RWST3AVLVL-4
Plant Spec Point Desc:		RWST (Unit 3) Average Level
Generic/Cond Desc:		Borated Water Storage Tank Level
Analog/Digital:		A
Engr Units/Dig States:		gal
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		335,000 gals
Zero Point Reference:		TNKBOT
Reference Point Notes:		N/A
PROC or SENS:		P
Number of Sensors:		2
How Processed:		2 Input Average w/ 5 % Deviation check
Sensor Locations:		Ground Level by RWST
Alarm/Trip Set Points:		See Description
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		AS-IS
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		DRY
Unique System Desc:		5 % Deviation check meaning the value at which point becomes Poor Quality. Each RWST level loop consists of a Rosemount DP transmitter and Foxboro Modules to provide alarm and indication functions. Alarms provided are: Lo-Lo Level at 60,000 gallons, Low Level at 155,000 gallons, Tech Spec Min Level at 322,000 gallons and Hi Level at 333,000 gallons. Note: the RWST is the Borated Water Storage Tank.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		WIND SPEED
Point ID:		WS-10M-TP-4
Plant Spec Point Desc:		10 Meter Wind Speed (T.P.)
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:		N/A
Sensor Locations:		10 Meter Tower 1 Mile SW of Plant
Alarm/Trip Set Points:		Hi: 75 mph Hi-Hi: 90 mph
NI Detector Power Supply Cut-off Power Level:		N/A
NI Detector Power Supply Turn-On Power Level:		N/A
Instrument Failure Mode:		0
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		Wind Speed meteorological data is gathered by instruments mounted on a 10 meter tower. The data (a 15 minute running average) is transmitted by radio to the plant and is received by the Campbell Scientific equipment located in the Plant Computer Room.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		WIND DIR
Point ID:		WD-10M-TP-4
Plant Spec Point Desc:		10 Meter Wind Direction (T.P.)
Generic/Cond Desc:		Wind Direction At Reactor Site
Analog/Digital:		A
Engr Units/Dig States:		° (Degrees)
Engr Units Conversion:		N/A
Minimum Instr Range:		0
Maximum Instr Range:		540
Zero Point Reference:		N/A
Reference Point Notes:		0 And 360 Are North. Switch Pt 180
PROC or SENS:		S
Number of Sensors:		1
How Processed:		N/A
Sensor Locations:		10 Meter Tower 1 Mile Sw Of Plant
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:		0
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		Wind direction is provided by instruments mounted on a 10 meter tower. The data (a 15 minute running average) is transmitted by radio to the plant and is received by the Campbell Scientific equipment located in the Computer Room. The 10 Meter Tower is located 1 mile SW of the site. Note: Wind is coming from direction reported by the instrument, with 0 and 360 being North.

TP4 DATA POINT LIBRARY REFERENCE FILE		
Date:		08/07/2007
Reactor Unit:		TP4
Data Feeder:		N/A
NRC ERDS Parameter:		STABB CLASS
Point ID:		D-TMP-A-SD-4
Plant Spec Point Desc:		Estimate Of Atmos Stability
Generic/Cond Desc:		Air Stability At A Reactor Site
Analog/Digital:		A
Engr Units/Dig States:		df/mm
Engr Units Conversion:		N/A
Minimum Instr Range:		-5
Maximum Instr Range:		15
Zero Point Reference:		N/A
Reference Point Notes:		N/A
PROC or SENS:		S
Number of Sensors:		1
How Processed:		N/A
Sensor Locations:		60 Meter Tower 7 Miles SSW Of Plant
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:		-5
Temperature Compensation For DP Transmitters		N/A
Level Reference Leg:		N/A
Unique System Desc:		Atmospheric stability is developed by taking the difference between the temperature at the 10 meter and 60 meters. The difference is multiplied by 2 to obtain the change per 100 meters altitude. A 15 minute running average data transmitted by radio telemetry to a Campbell Scientific receiver in the Plant Computer Room.