



10CFR50
Appendix E.VI

BOSTON EDISON

Pilgrim Nuclear Power Station
Rocky Hill Road
Plymouth, Massachusetts 02360

Roy A. Anderson

Senior Vice President - Nuclear

January 13, 1992

BECO 92-003

U.S. Nuclear Regulatory Commission
Document Control Desk
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Docket 50-293

Data Point Library
Emergency Response Data System

Boston Edison is hereby submitting the Data Point Library for Pilgrim Station's Emergency Response Data System in accordance with our project plan submitted on October 25, 1991 (BECO letter 2.91.146).


R. A. Anderson

MTI/clc/6580

Attachment

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Pilgrim Nuclear Power Station

9201210218 920113
PDR ADOCK 05000293
PDR

ADAS
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PILGRIM NUCLEAR POWER STATION
DATA POINT LIBRARY REFERENCE FILE

Date:	<u>10/ 9/91</u>
Reactor Unit:	<u>PG1</u>
Data Feeder:	<u>N/A</u>
NRC ERDS Parameter:	<u>NI Power RNG</u>
Point ID:	<u>C51C0010</u>
Plant Spec Point Desc:	<u>Reactor Power</u>
Generic/Cond Desc:	<u>Nuclear Instruments Power Range</u>
Analog/Digital:	<u>Analog</u>
Engr. Units/Dig States:	<u>0.0</u>
Engr. Units Conversion:	<u>Density, Temperature Compensated, Validated Calculation</u>
Minimum Instr. Range:	<u>0</u>
Maximum Instr. Range:	<u>100</u>
Zero Point Reference:	<u>N/A</u>
Reference Point Notes:	<u>N/A</u>
PROC or SENS:	<u>P</u>
Number of Sensors:	<u>6</u>
How Processed:	<u>Avg. APRM x Gain ADJ (SPDS Composed Pt)</u>
Sensor Locations:	<u>APRM A, B, C, D, E, F</u>
Alarm/Trip Set Points:	<u>N/A</u>
NI Detector Power Supply Cut-off Power Level:	<u>V 108-120-132 V @ 57HZ</u>
NI Detector Power Supply Turn-on Power Level:	<u>V</u>
Instrument Failure Mode:	<u>V Low</u>
Temperature Compensation For DP Transmitters:	<u>N/A</u>
Level Reference Leg:	<u>V</u>
Unique System Desc.:	This composed point is an average of the 6 power range channels. Points are processed and checked for consistency and points must be within 1 % of the average. Each power range channel is an average of selected local power range monitors in specific regions of the core.

PILGRIM NUCLEAR POWER STATION
DATA POINT LIBRARY REFERENCE FILE

Date: 10/08/91
Reactor Unit: PG1
Data Feeder: N/A
NRC ERDS Parameter: NI Inter Rng
Point ID: N/A
Plant Spec Point Desc:
Generic/Cond Desc: Intermediate Range Nuclear Inst.
Analog/Digital:
Engr. Units/Dig States:
Engr. Units Conversion:
Minimum Instr. Range:
Maximum Instr. Range:
Zero Point Reference:
Reference Point Notes:
PROC or SENS:
Number of Sensors:
How Processed:
Sensor Locations:
Alarm/Trip Set Points:
NI Detector Power Supply
Cut-off Power Level:
NI Detector Power Supply
Turn-on Power Level:
Instrument Failure Mode:
Temperature Compensation
For DP Transmitters:
Level Reference Leg:
Unique System Desc.: The SPDS at Pilgrim I does not monitor
this point for display.

PILGRIM NUCLEAR POWER STATION
DATA POINT LIBRARY REFERENCE FILE

Date: 10/08/91
Reactor Unit: PG1
Data Feeder: N/A

NRC ERDS Parameter: NI Source Rng

Point ID: NMS 268-270-272-274

Plant Spec Point Desc: SRM Chan A, B, C, D Flux

Generic/Cond Desc: Nuclear Instruments Source Range

Analog/Digital: A

Engr. Units/Dig States: CPS

Engr. Units Conversion: Direct

Minimum Instr. Range: 0.1 CPS

Maximum Instr. Range: 1.00 " 06 CPS

Zero Point Reference: N/A

Reference Point Notes: N/A

PROC or SENS: S

Number of Sensors: 4

How Processed: Directly Measured

Sensor Locations: In-Core

Alarm/Trip Set Points: N/A

NI Detector Power Supply
Cut-off Power Level: 24 vdc battery w/60 amp/hr capacity

NI Detector Power Supply
Turn-on Power Level: _____

Instrument Failure Mode: Low

Temperature Compensation
For DP Transmitters: N/A

Level Reference Leg: _____

Unique System Desc.: Direct measurement of the source range
monitor channels. All four channels are
monitored. These channels have no RPS
trip functions.

PILGRIM NUCLEAR POWER STATION
DATA POINT LIBRARY REFERENCE FILE

Date:	<u>10/08/91</u>
Reactor Unit:	<u>PG1</u>
Data Feeder:	<u>N/A</u>
NRC ERDS Parameter:	<u>Reac Vess Lev</u>
Point ID:	<u>B21C0010</u>
Plant Spec Point Desc:	<u>RPV Wtr Lvl</u>
Generic/Cond Desc:	<u>Reactor Vessel Water Level</u>
Analog/Digital:	<u>A</u>
Engr. Units/Dig States:	<u>Inches</u>
Engr. Units Conversion:	<u>Density, Temp., Comp, Validated Calculation</u>
Minimum Instr. Range:	<u>-277.5 in</u>
Maximum Instr. Range:	<u>303 in</u>
Zero Point Reference:	<u>Reactor zero</u>
Reference Point Notes:	<u>Bottom of separator skirt</u>
PROC or SENS:	<u>P</u>
Number of Sensors:	<u>12</u>
How Processed:	<u>SPDS Algorithm</u>
Sensor Locations:	<u></u>
Alarm/Trip Set Points:	<u></u>
NI Detector Power Supply Cut-off Power Level:	<u></u>
NI Detector Power Supply Turn-on Power Level:	<u></u>
Instrument Failure Mode:	<u>Low</u>
Temperature Compensation For DP Transmitters:	<u>N/A</u>
Level Reference Leg:	<u></u>
Unique System Desc.:	Composed point from the average of wide range and narrow range instruments. Points are validated and checked for consistency. Reactor zero reference in 482.5" from the bottom of the vessel, 127.5 inches above the top of active fuel.

PILGRIM NUCLEAR POWER STATION
DATA POINT LIBRARY REFERENCE FILE

Date:	<u>10/ 8/91</u>
Reactor Unit:	<u>PG1</u>
Data Feeder:	<u>N/A</u>
NRC FRDS Parameter:	<u>Main FD Flow</u>
Point ID:	<u>CD01M</u>
Plant Spec Point Desc:	<u>Total feedwater flow MLB/Hr.</u>
Generic/Cond Desc:	<u>Feedwater flow into the Reactor System.</u>
Analog/Digital:	<u>A</u>
Engr. Units/Dig States:	<u>MLB/Hr.</u>
Engr. Units Conversion:	<u>Direct</u>
Minimum Instr. Range:	<u>-.6260 MLB/Hr.</u>
Maximum Instr. Range:	<u>+5.00 MLB/Hr.</u>
Zero Point Reference:	<u></u>
Reference Point Notes:	<u></u>
PROC c" SENS:	<u>P</u>
Number of Sensors:	<u>2</u>
How Processed:	<u>Averaged, density compensated.</u>
Sensor Locations:	<u></u>
Alarm/Trip Set Points:	<u>N/A</u>
NI Detector Power Supply Cut-off Power Level:	<u>N/A</u>
NI Detector Power Supply Turn-on Power Level:	<u>N/A</u>
Instrument Failure Mode:	<u>Low</u>
Temperature Compensation For DP Transmitters:	<u>N/A</u>
Level Reference Leg:	<u>N/A</u>
Unique System Desc.:	Calculated point of loop A and B flows. Flows are summed and density corrected using validated feedwater temperature and reactor pressure.

PILGRIM NUCLEAR POWER STATION
DATA POINT LIBRARY REFERENCE FILE

Date:	10/08/91
Reactor Unit:	PCI
Data Feeder:	N/A
NRC ERDS Parameter:	RCIC Flow
Point ID:	RCI010
Plant Spec Point Desc:	RCIC Pump Flow
Generic/Cond Desc:	Reactor Core Isolation Cooling Flow
Analog/Digital:	A
Engr. Units/Dig States:	GPM
Engr. Units Conversion:	Direct
Minimum Instr. Range:	-62.5 GPM
Maximum Instr. Range:	+500 GPM
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	1
How P. Measured:	Direct Measure
Sensor Locations:	
Alarm/Trip Set Points:	ALM LO = 40 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:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	RCIC has a steam turbine driven pump. RCI-010 is pump discharge flow measured at the pump discharge upstream of the discharge isolation valves and the pump test return to the CST. The instrument is a dp instrument.

PILGRIM NUCLEAR POWER STATION
DATA POINT LIBRARY REFERENCE FILE

Page 7 of 27

Date:	10/08/91
Reactor Unit:	PG1
Data Feeder:	N/A
NRC ERDS Parameter:	RCS Pressure
Point ID:	B21C0210
Plant Spec Point Desc:	Reactor Pressure
Generic/Cond Desc:	Reactor Coolant System Pressure
Analog/Digital:	A
Engr. Units/Dig States:	PSIG
Engr. Units Conversion:	Compensated, Validated Calculation
Minimum Instr. Range:	-18.75 PSIG
Maximum Instr. Range:	1200 PSIG
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	P
Number of Sensors:	3
How Processed:	N/A
Sensor Locations:	N/A
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:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Composed point is the average of 1 narrow range and 2 wide range pressure/instruments Points are validated and check for consistency. Allowable differential from the average is 150 PSIG.

PILGRIM NUCLEAR POWER STATION
DATA POINT LIBRARY REFERENCE FILE

Page 8 of 27

Date:	<u>10/08/91</u>
Reactor Unit:	<u>PG1</u>
Data Feeder:	<u>N/A</u>
NRC ERDS Parameter:	<u>HPCI Flow</u>
Point ID:	<u>HPC 010</u>
Plant Spec Point Desc:	<u>HPCI Pump Flow</u>
Generic/Cond Desc:	<u>High Pressure Coolant Injection Flow</u>
Analog/Digital:	<u>A</u>
Engr. Units/Dig States:	<u>KGPM</u>
Engr. Units Conversion:	<u>Direct</u>
Minimum Instr. Range:	<u>-0.625 GPM</u>
Maximum Instr. Range:	<u>5,000 GPM</u>
Zero Point Reference:	<u>N/A</u>
Reference Point Notes:	<u>N/A</u>
PROC or SENS:	<u>S</u>
Number of Sensors:	<u>1</u>
How Processed:	<u>Direct Measure</u>
Sensor Locations:	<u></u>
Alarm/Trip Set Points:	<u>N/A</u>
NI Detector Power Supply Cut-off Power Level:	<u>N/A</u>
NI Detector Power Supply Turn-on Power Level:	<u>N/A</u>
Instrument Failure Mode:	<u>Low</u>
Temperature Compensation For DP Transmitters:	<u>N/A</u>
Level Reference Leg:	<u>N/A</u>
Unique System Desc.:	HPCI has a steam turbine driven pump. HPC-010 is the pump discharge flow measured at the pump outlet upstream of the discharge isolation valves and the pump test return to the CST. The instrument is a dp device.

PILGRIM NUCLEAR POWER STATION
DATA POINT LIBRARY REFERENCE FILE

Date:	<u>10/08/91</u>
Reactor Unit:	<u>PG1</u>
Data Feeder:	<u>N/A</u>
NRC ERDS Parameter:	<u>LPCI Flow</u>
Point ID:	<u>RHR 002, RHR 004</u>
Plant Spec Point Desc:	<u>A RHR Loop Flow, B RHR Loop Flow</u>
Generic/Cond Desc:	<u>Low Pressure Coolant Injection Flow</u>
Analog/Digital:	<u>A</u>
Engr. Units/Dig States:	<u>KGPM</u>
Engr. Units Conversion:	<u>Direct</u>
Minimum Instr. Range:	<u>-0.3125 KGPM</u>
Maximum Instr. Range:	<u>+20.0 KGPM</u>
Zero Point Reference:	<u>N/A</u>
Reference Point Notes:	<u>N/A</u>
PROC or SENS:	<u>S</u>
Number of Sensors:	<u>2</u>
How Processed:	<u>Direct Measure</u>
Sensor Locations:	<u>N/A</u>
Alarm/Trip Set Points:	<u>N/A</u>
NI Detector Power Supply Cut-off Power Level:	<u>N/A</u>
NI Detector Power Supply Turn-on Power Level:	<u>N/A</u>
Instrument Failure Mode:	<u>LOW</u>
Temperature Compensation For DP Transmitters:	<u>N/A</u>
Level Reference Leg:	<u>N/A</u>
Unique System Desc.:	Flow elements are located upstream of the LPCI injection line and the containment cooling header. Instrument does not exist for individual header flows. Instrument represents total RHR loop flow.

PILGRIM NUCLEAR POWER STATION
DATA POINT LIBRARY REFERENCE FILE

Date:	<u>10/08/91</u>
Reactor Unit:	<u>PG1</u>
Data Field:	<u>N/A</u>
NRC ERDS Parameter:	<u>CR Spray FL</u>
Point ID:	<u>CSP 002, CSP 004</u>
Plant Spec Point Desc:	<u>A/B Core Spray Pump FL</u>
Generic/Cond Desc:	<u>Core Spray Cooling System Flow</u>
Analog/Digital:	<u>A</u>
Engr. Units/Dig States:	<u>KGPM</u>
Engr. Units Conversion:	<u>Direct</u>
Minimum Instr. Range:	<u>-0.625 KGPM</u>
Maximum Instr. Range:	<u>+5.000 KGPM</u>
Zero Point Reference:	<u>N/A</u>
Reference Point Notes:	<u>N/A</u>
PROC or SENS:	<u>S</u>
Number of Sensors:	<u>2</u>
How Processed:	<u>Direct Measure</u>
Sensor Locations:	<u></u>
Alarm/Trip Set Points:	<u>N/A</u>
NI Detector Power Supply Cut-off Power Level:	<u>N/A</u>
NI Detector Power Supply Turn-on Power Level:	<u>N/A</u>
Instrument Failure Mode:	<u>Low</u>
Temperature Compensation For DP Transmitters:	<u>N/A</u>
Level Reference Leg:	<u>N/A</u>
Unique System Desc.:	<u>Flow element is located upstream of discharge isolation valves and pump test line.</u>

PILGRIM NUCLEAR POWER STATION
DATA POINT LIBRARY REFERENCE FILE

Page 11 of 27

Date:	10/08/91
Reactor Unit:	PG1
Data Feeder:	1
NRC ERDS Parameter:	DW FD SMP LV
Point ID:	N/A
Plant Spec Point Desc:	N/A
Generic/Cond Desc:	Drywell Floor Drain Sump Level
Analog/Digital:	N/A
Engr. Units/Dig States:	N/A
Engr. Units Conversion:	N/A
Minimum Instr. Range:	
Maximum Instr. Range:	
Zero Point Reference:	
Reference Point Notes:	
PROC or SENS:	
Number of Sensors:	
How Processed:	
Sensor Locations:	
Alarm/Trip Set Points:	
NI Detector Power Supply Cut-off Power Level:	
NI Detector Power Supply Turn-on Power Level:	
Instrument Failure Mode:	
Temperature Compensation For DP Transmitters:	
Level Reference Leg:	
Unique System Desc.:	This parameter is not available at PGI. Drywell sump level is determined by integrating volume of liquid pumped out of the sump over time. Sumps receive Group II containment isolation signal.

PILGRIM NUCLEAR POWER STATION
DATA POINT LIBRARY REFERENCE FILE

Date: 10/08/91
Reactor Unit: PG1
Data Feeder: N/A

NRC ERDS Parameter: EFF Gas RAD

Point ID: RAD 042

Plant Spec Point Desc: Main Stack Gas RAD Monitor

Generic/Cond Desc: Radioactivity of Declared Gases

Analog/Digital: A

Engr. Units/Dig States: P/HR

Engr. Units Conversion: Direct

Minimum Instr. Range: 0.1 RAD

Maximum Instr. Range: 1000 RAD

Zero Point Reference: N/A

Reference Point Notes: N/A

PROC or SENS: S

Number of Sensors: 1

How Processed: Direct Measure

Sensor Locations: _____

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: N/A

Level Reference Leg: N/A

Unique System Desc.: High range effluent monitor. When
instrument is on-scale, the AOG system
should be isolated so monitored effluent
has been processed thru the SBT
system.

PILGRIM NUCLEAR POWER STATION
DATA POINT LIBRARY REFERENCE FILE

Date:	<u>10/08/91</u>
Reactor Unit:	<u>PG1</u>
Data Feeder:	<u>N/A</u>
NRC ERUC Parameter:	<u>EFF Liq RAD</u>
Point ID:	<u>RAD 008</u>
Plant Spec Point Desc:	<u>Radiolite Effluent RA</u>
Generic/Cond Desc:	<u>Radioactivity of Released Liquids.</u>
Analog/Digital:	<u>A</u>
Engr. Units/Dig States:	<u>CPS</u>
Engr. Units Conversion:	<u>Direct Measure</u>
Minimum Instr. Range:	<u>0.1 CPS</u>
Maximum Instr. Range:	<u>1 X 10⁶ CPS</u>
Zero Point Reference:	<u>N/A</u>
Reference Point Notes:	<u>N/A</u>
PROC or SENS:	<u>S</u>
Number of Sensors:	<u>1</u>
How Processed:	<u>Direct Measure</u>
Sensor Locations:	<u></u>
Alarm/Trip Set Points:	<u>N/A</u>
NI Detector Power Supply Cut-off Power Level:	<u>N/A</u>
NI Detector Power Supply Turn-on Power Level:	<u>N/A</u>
Instrument Failure Mode:	<u>Low</u>
Temperature Compensation For DP Transmitters:	<u>N/A</u>
Level Reference Leg:	<u>N/A</u>
Unique System Desc.:	Monitors liquid effluent being discharged to circulating water discharge (ocean). Trip setpoint is set by plant operators to isolate the pump discharge on high radiation level.

PILGRIM NUCLEAR POWER STATION
DATA POINT LIBRARY REFERENCE FILE

Date:	<u>10/ 9/91</u>
Reactor Unit:	<u>PG1</u>
Data Feeder:	<u>N/A</u>
NRC ERDS Parameter:	<u>CND A/E RAD</u>
Point ID:	<u>RAD 062</u>
Plant Spec Point Desc:	<u>Offgas linear RAD monitor.</u>
Generic/Cond Desc:	<u>Condenser Air Ejector Radioactivity.</u>
Analog/Digital:	<u>A</u>
Engr. Units/Dig States:	<u>Units</u>
Engr. Units Conversion:	<u>Direct</u>
Minimum Instr. Range:	<u>0.1</u>
Maximum Instr. Range:	<u>125</u>
Zero Point Reference:	<u>N/A</u>
Reference Point Notes:	<u>N/A</u>
PROC or SENS:	<u>S</u>
Number of Sensors:	<u>1</u>
How Processed:	<u>Direct measure.</u>
Sensor Locations:	<u></u>
Alarm/Trip Set Points:	<u>N/A</u>
NI Detector Power Supply Cut-off Power Level:	<u>N/A</u>
NI Detector Power Supply Turn-on Power Level:	<u>N/A</u>
Instrument Failure Mode:	<u>Low</u>
Temperature Compensation For DP Transmitters:	<u>N/A</u>
Level Reference Leg:	<u>N/A</u>
Unique System Desc.:	For detecting changes in off-gas fission product concentration. Not a process monitor but is used for detecting failed or ruptured fuel elements.

PILGRIM NUCLEAR POWER STATION
DATA POINT LIBRARY REFERENCE FILE

Page 15 of 27

Date: 10/ 9/91
 Reactor Unit: PG1
 Data Feeder: N/A
 NRC ERDS Parameter: DW RAD
 Point ID: RAD 084, RAD 086
 Plant Spec Point Desc: Drywell radiation A/B
 Generic/Cond Desc: Radiation level in the drywell.
 Analog/Digital: A
 Engr. Units/Dig States: R/Hr
 Engr. Units Conversion: Direct
 Minimum Inst. Range: 1.0 R/Hr.
 Maximum Instr. Range: 1 x 10² R/Hr.
 Zero Point Reference: N/A
 Reference Point Notes: N/A
 PROC or SENS: S
 Number of Sensors: 2
 How Processed: Direct measure.
 Sensor Locations: _____
 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: N/A
 Level Reference Leg: N/A
 Unique System Desc.: N/A

Monitors gross drywell gamma radiation.
 Installed in drywell penetrations at the
 39' elevation and are capped on the inside.

PILGRIM NUCLEAR POWER STATION
DATA POINT LIBRARY REFERENCE FILE

Date:	10/ 9/91
Reactor Unit:	PG1
Data Feeder:	N/A
NRC ERDS Parameter:	MN Steam Rad.
Point ID:	RAD Q52, Q54, Q56.
Plant Spec Point Desc:	Main steam line radiation
Generic/Cond Desc:	Radiation level of the main steam line.
Analog/Digital:	A
Engr. Units/Dig States:	MR/Hr.
Engr. Units Conversion:	Direct
Minimum Instr. Range:	1.0
Maximum Instr. Range:	1 x 10 ⁶
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	3
How Processed:	Direct measure.
Sensor Locations:	
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:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Input to MSIV Group I PCIS signal and to RPS for Rx scram at 7x background radiation. Will detect gross release of fission products from fuel.

PILGRIM NUCLEAR POWER STATION
DATA POINT LIBRARY REFERENCE FILE

Page 17 of 27

Date:	<u>10/09/91</u>
Reactor Unit:	<u>PG1</u>
Data Feeder:	<u>N/A</u>
NRC ERDS Parameter:	<u>DW Press.</u>
Point ID:	<u>D23 C0010</u>
Plant Spec Point Desc:	<u>Drywell Pressure</u>
Generic/Cond Desc:	<u>Drywell Pressure</u>
Analog/Digital:	<u>A</u>
Engr. Units/Dig States:	<u>PSIG</u>
Engr. Units Conversion:	<u>Direct</u>
Minimum Instr. Range:	<u>NA</u>
Maximum Instr. Range:	<u>NA</u>
Zero Point Reference:	<u>NA</u>
Reference Point Notes:	<u>NA</u>
PROC or SENS:	<u>P</u>
Number of Sensors:	<u>8</u>
How Processed:	<u>SPDS ALGORITHM</u>
Sensor Locations:	<u>NA</u>
Alarm/Trip Set Points:	<u>NA</u>
NI Detector Power Supply Cut-off Power Level:	<u>NA</u>
NI Detector Power Supply Turn-on Power Level:	<u>NA</u>
Instrument Failure Mode:	<u>Low</u>
Temperature Compensation For DP Transmitters:	<u>NA</u>
Level Reference Leg:	<u>NA</u>
Unique System Desc.:	A validated parameter which averages and consistency checks drywell pressure parameters.

PILGRIM NUCLEAR POWER STATION
DATA POINT LIBRARY REFERENCE FILE

Page 18 of 27

Date:	<u>10/ 9/91</u>
Reactor Unit:	<u>PG1</u>
Data Feeder:	<u>N/A</u>
NRC ERDS Parameter:	<u>DW Press</u>
Point ID:	<u>Dry 076</u>
Plant Spec Point Desc:	<u>Drywell Pressure</u>
Generic/Cond Desc:	<u>Drywell Pressure</u>
Analog/Digital:	<u>A</u>
Engr. Units/Dig States:	<u>PSIG</u>
Engr. Units Conversion:	<u>Direct</u>
Minimum Instr. Range:	<u>-0.2297</u>
Maximum Instr. Range:	<u>+3.000</u>
Zero Point Reference:	<u>N/A</u>
Reference Point Notes:	<u>N/A</u>
PROC or SENS:	<u>S</u>
Number of Sensors:	<u>1</u>
How Processed:	<u>Direct measure.</u>
Sensor Locations:	<u></u>
Alarm/Trip Set Points:	<u>Low = 0.9 PSIG High = 2.2 PSIG</u>
NI Detector Power Supply Cut-off Power Level:	<u>N/A</u>
NI Detector Power Supply Turn-on Power Level:	<u>N/A</u>
Instrument Failure Mode:	<u>Low</u>
Temperature Compensation For DP Transmitters:	<u>N/A</u>
Level Reference Leg:	<u>N/A</u>
Unique System Desc.:	Narrow range drywell pressure 0-3.0 psig. Nominal drywell pressure at 100% RTP is 1.4 psig. Reactor Scram setpoint is 2.5 psig.

POINT NUCLEAR POWER STATION
DATA POINT LIBRARY REFERENCE FILE

Revision:	10/10/91
Point Name:	PG1
Detector:	N/A
Unit:	DW Temp
Point:	28
Point Description:	Drywell Temp.
Point Units:	Drywell Temperature
Analog:	A
Engr. Units/Dig. States:	DECF
Engr. Units Conversion:	Direct
Minimum Instr. Range:	0° F
Maximum Instr. Range:	600° F
Zero Point Reference:	N/A
Reference Point Notes:	N/A
PROC or SENS:	P
Number of Sensors:	18
How Processed:	Weighted average.
Sensor Locations:	Drywell-various AZ and EL.
Alarm/Trip Set Points:	190° F
NI Detector Power Supply Cut-off Power Level:	N/A
NI Detector Power Supply Turn-on Power Level:	N/A
Instrument Failure Mode:	High
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	Composed point of 18 temperature sensors averaged and weighed.

PILGRIM NUCLEAR POWER STATION
DATA POINT LIBRARY REFERENCE FILE

Date:	<u>10/9 /91</u>
Reactor Unit:	<u>PG1</u>
Data Feeder:	<u>N/A</u>
NRC ERLS Parameter:	<u>Suppression Pool Water Level.</u>
Point ID:	<u>SC018, 020</u>
Plant Spec Point Desc:	<u>A/B torus wide range water level.</u>
Generic/Cond Desc:	<u>Suppression pool water level.</u>
Analog/Digital:	<u>A</u>
Engr. Units/Dig States:	<u>Inches</u>
Engr. Units Conversion:	<u>Direct</u>
Minimum Instr. Range:	<u>0 in.</u>
Maximum Instr. Range:	<u>300 in</u>
Zero Point Reference:	<u>0=bottom of Torus</u>
Reference Point Notes:	<u>N/A</u>
PROC or SENS:	<u>S</u>
Number of Sensors:	<u>2</u>
How Processed:	<u>Direct measure.</u>
Sensor Locations:	<u></u>
Alarm/Trip Set Points:	<u>N/A</u>
NI Detector Power Supply Cut-off Power Level:	<u>N/A</u>
NI Detector Power Supply Turn-on Power Level:	<u>N/A</u>
Instrument Failure Mode:	<u>Low</u>
Temperature Compensation For DP Transmitters:	<u>N/A</u>
Level Reference Log:	<u>N/A</u>
Unique System Desc.:	Wide range Torus water level. Instrument zero corresponds to the bottom of the Torus. Scale used with EOP-03.

PILGRIM NUCLEAR POWER STATION
DATA POINT LIBRARY REFERENCE FILE

Date: 10/09/91
Reactor Unit: PG1
Data Feeder: H/A

HRC ERDS Parameter: SP TEMP

Point ID: D23C4203, D23C4204, D23C4205, D23C4206

Plant Spec Point Desc: Suppression CHMBR, AZ

Generic/Cond Desc: Suppression Pool Temperature

Analog/Digital: A

Engr. Units/Dig States: *F

Engr. Units Conversion: _____

Minimum Instr. Range: 0°F

Maximum Instr. Range: 200°F

Zero Point Reference: N/A

Reference Point Notes: N/A

PROC or SENS: P

Number of Sensors: 3

How Processed: SPDS ALGORITHM

Sensor Locations: _____

Alarm/Trip Set Points: N/A

N1 Detector Power Supply
Cut-off Power Level: N/A

N1 Detector Power Supply
Turn-on Power Level: N/A

Instrument Failure Mode: High

Temperature Compensation
For DP Transmitters: N/A

Level Reference Leg: N/A

Unique System Desc.: Local torus water temp from 4 locations
in close proximity to the SRV locations.

PILGRIM NUCLEAR POWER STATION
DATA POINT LIBRARY REFERENCE FILE

Date:	<u>10/9/91</u>
Reactor Unit:	<u>PG1</u>
Data Feeder:	<u>N/A</u>
NRC ERDS Parameter:	<u>H₂ Conc.</u>
Point ID:	<u>M51C0015</u>
Plant Spec Point Desc:	<u>Max. H₂ concentration.</u>
Generic/Cond Desc:	<u>Drywell or Torus Hydrogen Concentration.</u>
Analog/Digital:	<u>A</u>
Engr. Units/Dig States:	<u>%</u>
Engr. Units Conversion:	<u>Calculated point w/H₂ concentration measurement and valve line up.</u>
Minimum Instr. Range:	<u>N/A</u>
Maximum Instr. Range:	<u>N/A</u>
Zero Point Reference:	<u>N/A</u>
Reference Point Notes:	<u>N/A</u>
PROC or SENS:	<u>P</u>
Number of Sensors:	<u>Multiple</u>
How Processed:	<u>SPDS ALGORITHM</u>
Sensor Locations:	<u>N/A</u>
Alarm/Trip Set Points:	<u>N/A</u>
NI Detector Power Supply Cut-off Power Level:	<u>N/A</u>
NI Detector Power Supply Turn-on Power Level:	<u>N/A</u>
Instrument Failure Mode:	<u>N/A</u>
Temperature Compensation For DP Transmitters:	<u>N/A</u>
Level Reference Leg:	<u>N/A</u>
Unique System Desc.:	Composed point that validates system valve line up. Reads H ₂ conc. from both system A and B and displays the higher valve H ₂ sample from 1 of 4 locations in the drywell or 1 of 2 locations in the Torus.

PII CRIM NUCLEAR POWER STATION
DATA POINT LIBRARY REFERENCE FILE

Page 23 of 27

Date:	<u>12/ 9/91</u>
Reactor Unit:	<u>PG1</u>
Data Feeder:	<u>N/A</u>
NRC ERDS Parameter:	<u>O2 Conc</u>
Point ID:	<u>M51C0035</u>
Plant Spec Point Desc:	
Generic/Cond Desc:	<u>Drywell or Torus Oxygen Concentration</u>
Analog/Digital:	<u>A</u>
Engr. Units/Dig States:	<u>N/A</u>
Engr. Units Conversion:	<u>N/A</u>
Minimum Instr. Range:	<u>N/A</u>
Maximum Instr. Range:	<u>N/A</u>
Zero Point Reference:	<u>N/A</u>
Reference Point Notes:	<u>N/A</u>
PROC or SENS:	<u>P</u>
Number of Sensors:	<u>N/A</u>
How Processed:	<u>SPDS ALGORITHM</u>
Sensor Locations:	<u>N/A</u>
Alarm/Trip Set Points:	<u>N/A</u>
N1 Detector Power Supply Cut-off Power Level:	<u>N/A</u>
N1 Detector Power Supply Turn-on Power Level:	<u>N/A</u>
Instrument Failure Mode:	
Temperature Compensation For DP Transmitters:	<u>N/A</u>
Level Reference Leg:	<u>N/A</u>
Unique System Desc.:	Composed point that validates System Valve Lineup. Reads O ₂ Conc from both systems and displays the higher value O ₂ sample is from 1 of 4 locations in the drywell or 1 of 2 locations in the drywell or 1 of 2 locations in the torus.

PILGRIM NUCLEAR POWER STATION
DATA POINT LIBRARY REFERENCE FILE

Date: 10/ 9/91
Reactor Unit: PG1
Data Feeder: N/A
NRC ERDS Parameter: CST Level
Point ID: CON016, CON018
Plant Spec Point Desc: Cond Storage Tank Level A/B
Generic/Cond Desc: Condensate storage tank A/B Level
Analog/Digital: A
Engr. Units/Dig States: Ft.
Engr. Units Conversion: Direct
Minimum Instr. Range: 0.625 Ft.
Maximum Instr. Range: 40.0 Ft.
Zero Point Reference: Ground Level
Reference Point Notes:
PROC or SENS: S
Number of Sensors: 2
How Processed: Direct Measure
Sensor Locations:
Alarm/Trip Set Points: Low=18 Ft. High=39 Ft.
NI Detector Power Supply
Cut-off Power Level: N/A
NI Detector Power Supply
Turn-on Power Level: N/A
Instrument Failure Mode: MID
Temperature Compensation
For DP Transmitters: N/A
Level Reference Leg: N/A
Unique System Desc.: CST level normally at 39 feet. Tank capacity is 275,000 gal each. 75,000 gal in each tank is reserved for the HPCI and RCIC systems via a stand pipe arrangement 10% feet = 75,000 gal.

PILGRIM NUCLEAR POWER STATION
DATA POINT LIBRARY REFERENCE FILE

Date:	10/ 9/91
Reactor Unit:	PG1
Data Order:	N/A
NRC ERDS Parameter:	Wind Speed
Point ID:	Mtr. 014/018
Plant Spec Point Desc:	33' Wind Speed/220 Wind Speed
Generic/Cond Desc:	Wind Speed at the Reactor Site
Analog/Digital:	A
Engr. Units/Dig States:	MPH
Engr. Units Conversion:	Direct Measure
Minimum Instr. Range:	0 MPH
Maximum Instr. Range:	100 MPH
Zero Point Reference:	M/A
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	2
How Processed:	Direct Measure
Sensor Locations:	Met Tower
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:	
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	33 Ft. wind speed is located east of the Reactor Building at the site boundary. The 220 ft. wind speed is located west of the Reactor Building at the site boundary.

PILGRIM NUCLEAR POWER STATION
DATA POINT LIBRARY REFERENCE FILE

Date:	10/ 9/91
Reactor Unit:	PG1
Data Feeder:	N/A
NRC ERDS Parameter:	Wind Dir.
Point ID:	Mtr. 016/ Mtr. 020
Plant Spec Point Desc:	33' Wind Direction/220' Wind Direction
Generic/Cond Desc:	Wind Direction at the Reactor Site.
Analog/Digital:	
Engr. Units/Dig States:	Deg. AZ
Engr. Units Conversion:	Direct
Minimum Instr. Range:	0° AZ
Maximum Instr. Range:	540° AZ
Zero Point Reference:	0 MPH
Reference Point Notes:	N/A
PROC or SENS:	S
Number of Sensors:	2
How Processed:	Direct Measure
Sensor Locations:	Mct Tower
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:	Random
Temperature Compensation For DP Transmitters:	N/A
Level Reference Leg:	N/A
Unique System Desc.:	33 Ft. wind direction is located at the east site boundary. The 220 ft. wind direction is located at the west site boundary.

PILGRIM NUCLEAR POWER STATION
DATA POINT LIBRARY REFERENCE FILE

Date:	<u>10/ 9/91</u>
Reactor Unit:	<u>PG1</u>
Data Feeder:	_____
NRC ERDS Parameter:	<u>Stab Clas</u>
Point ID:	<u>Mtr. 012</u>
Plant Spec Point Desc:	<u>MET Tower 220'-33' Delta Temp.</u>
Generic/Cond Desc:	<u>Wind Direction at the Reactor Site.</u>
Analog/Digital:	<u>A</u>
Engr. Units/Dig States:	<u>DEG F</u>
Engr. Units Conversion:	<u>Direct Measure</u>
Minimum Instr. Range:	<u>-10°F</u>
Maximum Instr. Range:	<u>18°F</u>
Zero Point Reference:	_____
Reference Point Notes:	_____
PROC or SENS:	<u>P</u>
Number of Sensors:	<u>2</u>
How Processed:	<u>Difference</u>
Sensor Locations:	<u>Met Tower</u>
Alarm/Trip Set Points:	<u>N/A</u>
NI Detector Power Supply Cut-off Power Level:	<u>N/A</u>
NI Detector Power Supply Turn-on Power Level:	<u>N/A</u>
Instrument Failure Mode:	<u>Random</u>
Temperature Compensation For DP Transmitters:	<u>N/A</u>
Level Reference Leg:	<u>N/A</u>
Unique System Desc.:	This point is an indication of Air stability at the site. This parameter in conjunction with other MET data is used for indication of thermal inversions or fumigation due to seasonal meteorological conditions.