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SHIELDS L. DALTROFF
VICE PRESIDENT
ELECTRIC PRODUCTION

(215) 841-5001

September 27, 1984

Docket Nos. 50-277
50-278

Mr. Darrell G. Eisenhut
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

SUBJECT: Peach Bottom Atomic Power Station
Implementation of NUREG-0737
Supplement 1, Regulatory Guide 1.97 -
Application to Emergency Response Facilities

REFERENCE: 1) Correspondence dated April 15, 1983,
S. L. Daltroff, PECO, to D. G. Eisenhut,
NRC
2) Correspondence dated January 16, 1984,
S. L. Daltroff, PECO, to D. G. Eisenhut,
NRC

Dear Mr. Eisenhut:

This letter transmits additional information regarding the implementation of NUREG-0737, Supplement 1, Item 6, Regulatory Guide 1.97 - Application to Emergency Response Facilities.

Generic Letter No. 82-33, dated December 17, 1982, (D. G. Eisenhut, NRC, to All Licensees of Operating Reactors) requested the licensee to submit a report describing how it meets certain requirements in Regulatory Guide 1.97, "Instrumentation For Light-Water-Cooled Nuclear Power Plants to Assess Plant and Environs Conditions During and Following An Accident." It was requested that the report identify the extent of compliance, proposed modifications, implementation schedules, and justifications for exceptions to the guidance contained in Regulatory Guide 1.97.

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Attachment III to reference (1) described our plans for completing an engineering evaluation which compares the design of plant instrumentation to the guidance in Generic Letter 82-33 and Regulatory Guide 1.97. Attachments I and II to reference (2) provided the results of the evaluation for all of the instrumentation variables addressed in Regulatory Guide 1.97, except for primary containment isolation valve position indication. This submittal revises Attachments I and II to include the primary containment isolation valve position indications, and to make some minor corrections for other variables as described below. This completes our response to NUREG-0737, Supplement 1, Item 6, Regulatory Guide 1.97. As previously stated in reference (2), the schedule for each proposed modification identified in Attachment II is no later than the end of the second refueling outage for each unit following the Spring 1984 Unit 2 refueling outage.

The additions and changes in Attachment II deal with the following matters:

1. Provides a detailed evaluation of primary containment isolation valve position indication (Variable B10).
2. Variable D25 - Part 2 (D.C. Bus Voltage and Current) - Minor corrections in the description of equipment installed range, environmental qualification, quality assurance, sensor numbers and locations, power sources, and location of displays.
3. Variable D25 - Part 7 (Instrument air supply to CAD valves) - Correction to the list of applicable CAD valves.
4. Variable E12 (Primary Coolant and Sump Sampling) - Identifies a modification which will be initiated to revise the sampling range capabilities for total dissolved gas and dissolved oxygen to agree with NRC acceptance of the BWR Owners' Group position as documented in correspondence dated July 17, 1984 (W. V. Johnston, NRC, to G. G. Sherwood, General Electric Company).

Mr. Darrell G. Eisenhut

September 27, 1984

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Should you have any questions regarding this matter,
please do not hesitate to contact us.

Very truly yours,

A handwritten signature in cursive script, appearing to read "A. R. Blough".

Attachments

cc: A. R. Blough, Site Inspector

PEACH BOTTOM ATOMIC POWER STATION
UNITS 2 AND 3
DOCKET NOS. 50-277
50-278

ATTACHMENT II, REV. 1
RESPONSE TO NUREG-0737, SUPPLEMENT 1
REGULATORY GUIDE 1.97

SEPTEMBER 1984

ATTACHMENT II , REV.1
PEACH BOTTOM APS UNITS 2 AND 3 DETAILED COMPLIANCE WITH REGULATORY GUIDE 1.97

VARIABLE NO. A1
(ALSO SEE VARIABLES B6, C4, AND C9)

DESCRIPTION:	REACTOR PRESSURE	INSTALLED RANGE:	PT-2(3)-6-105; 0-1500 PSIG PT-2(3)-6-53A,B,C; 0-1200 PSIG
REQUIRED RANGE:	0 TO 1500 PSIG	ENVIRONMENTAL QUALIFICATION:	NO
CATEGORY:	1	SEISMIC QUALIFICATION:	NO
PURPOSE:	OPERATOR ACTION: 1) DEPRESSURIZE RPV AND MAINTAIN SAFE COOLDOWN RATE BY ANY OF SEVERAL SYSTEMS, SUCH AS MAIN TURBINE BYPASS VALVES, HPCI, RCIC AND RWCU; 2) MANUALLY OPEN ONE SRV TO REDUCE PRESSURE TO BELOW SRV SETPOINT IF ANY SRV IS CYCLING. SAFETY FUNCTION: 1) CORE COOLING; 2) MAINTAIN REACTOR COOLANT SYSTEM INTEGRITY.	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	MULTI-CHANNEL
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		PT-2(3)-6-105 PT-2(3)-6-53A,B,C	REACTOR BUILDING REACTOR BUILDING
		POWER SUPPLY:	UNINTERRUPTIBLE POWER (ON-SITE SOURCE BACKED BY STATION BATTERIES)
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

A MODIFICATION HAS BEEN INITIATED TO INSTALL INSTRUMENTATION WHICH IS ENVIRONMENTALLY AND SEISMICALLY QUALIFIED AND IS POWERED BY CLASS 1E POWER SOURCES. ALL OTHER REQUIREMENTS FOR CATEGORY 1 INSTRUMENTATION WILL BE INCORPORATED INTO THE MODIFICATION (MODIFICATION 893B).

SCHEDULE FOR UPGRADE:

UNIT 2 INSTALLATION - NEXT REFUELING OUTAGE.

UNIT 3 INSTALLATION - NEXT REFUELING OUTAGE.

VARIABLE NO. A2
(ALSO SEE VARIABLE B4)

DESCRIPTION:	REACTOR WATER LEVEL	INSTALLED RANGE:	-325" TO 0" -165" TO +50"
REQUIRED RANGE:	BOTTOM OF CORE SUPPORT PLATE (-331" AT PEACH BOTTOM) TO LESSER OF TOP OF VESSEL OR CENTERLINE OF MAIN STEAM LINE (CENTERLINE OF THE MAIN STEAM AT PEACH BOTTOM IS +114"). (1)	ENVIRONMENTAL QUALIFICATION:	YES
CATEGORY:	1	SEISMIC QUALIFICATION:	YES
PURPOSE:	OPERATOR ACTION: RESTORE AND MAINTAIN RPV WATER LEVEL.	QUALITY ASSURANCE:	FULL Q.A. PLAN
		REDUNDANCY:	4 CHANNELS (2 DIVISIONS)
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		LT-2(3)-2-3-110A, B	REACTOR BUILDING
		LT-2(3)-2-3-111A, B	REACTOR BUILDING
		POWER SUPPLY:	CLASS 1E
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

NOTES:

(1) SECTION D OF R.G.1.97, REVISION 2, STATES, "PLANTS CURRENTLY OPERATING SHOULD MEET THE PROVISIONS OF THIS GUIDE, EXCEPT AS MODIFIED BY NUREG-0737..." THE INSTALLED RANGE IS IN COMPLIANCE WITH NUREG 0737, ITEM II.F.2 IN LIEU OF TABLE 1 OF REGULATORY GUIDE 1.97. THE NUREG 0737 REQUIREMENT IS TO MEASURE FROM THE BOTTOM OF ACTIVE FUEL (AT PEACH BOTTOM, THE BOTTOM OF ACTIVE FUEL IS IS -322") TO ABOVE NORMAL WATER LEVEL (AT PEACH BOTTOM, NORMAL WATER LEVEL IS +23").

VARIABLE NO. A3
(ALSO SEE VARIABLE D6)

DESCRIPTION:	SUPPRESSION POOL WATER TEMPERATURE	INSTALLED RANGE:	30 TO 230 DEGREES FAHRENHEIT
REQUIRED RANGE:	40 TO 230 DEGREES F	ENVIRONMENTAL QUALIFICATION:	YES
CATEGORY:	1	SEISMIC QUALIFICATION:	YES
PURPOSE:	OPERATOR ACTION: (1) OPERATE AVAILABLE SUPPRESSION POOL COOLING SYSTEM WHEN POOL TEMPERATURE EXCEEDS NORMAL OPERATING LIMITS; (2) SCRAM REACTOR IF TEMPERATURE REACHES LIMIT FOR SCRAM; (3) IF SUPPRESSION POOL TEMPERATURE CANNOT BE MAINTAINED BELOW THE HEAT CAPACITY TEMPERATURE LIMIT, MAINTAIN RPV PRESSURE BELOW THE CORRESPONDING LIMIT; AND (4) ATTEMPT TO CLOSE ANY STUCK-OPEN RELIEF VALVE. SAFETY FUNCTION: (1) MAINTAIN CONTAINMENT INTEGRITY AND (2) MAINTAIN REACTOR COOLANT SYSTEM INTEGRITY.	QUALITY ASSURANCE:	FULL Q.A. PLAN
		REDUNDANCY:	2 DIVISIONS
		<u>SENSOR(S):</u> TE-2(3)-2-71 A1,B1,C1 D1,E1,F1,G1,H1,J1 K1,L1,M1,N1 TE-2(3)-2-71 A2,B2,C2 D2,E2,F2,G2,H2,J2 K2,L2,M2,N2	<u>LOCATION:</u> LOCATED ON TORUS SHELL LOCATED ON TORUS SHELL
		POWER SUPPLY:	CLASS 1E
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

THE ABOVE INFORMATION IS APPLICABLE TO UNIT 3. A MODIFICATION IS IN PROGRESS TO UPGRADE UNIT 2 FROM A CATEGORY 3 INSTALLATION TO THAT SHOWN ABOVE (MOD 603B).

SCHEDULE FOR UPGRADE:

UNIT 2: TO BE INSTALLED DURING THE NEXT REFUELING OUTAGE.
UNIT 3: COMPLETE

VARIABLE NO. A4
(ALSO SEE VARIABLE C7 AND D5)

DESCRIPTION:	SUPPRESSION POOL WATER LEVEL	INSTALLED RANGE:	1-21 FT.
REQUIRED RANGE:	BOTTOM OF THE ECCS SUCTION LINE TO 5 FT. ABOVE NORMAL WATER LEVEL	ENVIRONMENTAL QUALIFICATION:	YES
CATEGORY:	1	SEISMIC QUALIFICATION:	YES
PURPOSE:	OPERATOR ACTION: MAINTAIN SUPPRESSION POOL WATER LEVEL WITHIN NORMAL OPERATING LIMITS: 1) TRANSFER RCIC SUCTION FROM THE CONDENSATE STORAGE TANK (CST) TO THE SUPPRESSION POOL IN THE EVENT OF HIGH SUPPRESSION-POOL LEVEL; AND 2) IF SUPPRESSION POOL WATER LEVEL CANNOT BE MAINTAINED BELOW THE SUPPRESSION POOL LOAD LIMIT, MAINTAIN RPV PRESSURE BELOW CORRESPONDING LIMIT.	QUALITY ASSURANCE:	FULL Q.A. PLAN
		REDUNDANCY:	2 DIVISIONS
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		LT-8123(9123)A,B	REACTOR BUILDING
		POWER SUPPLY:	CLASS 1E
	SAFETY FUNCTION: MAINTAIN CONTAINMENT INTEGRITY.	LOCATION OF DISPLAY:	MAIN CONTROL ROOM (RECORDERS AND INDICATORS) AND EMERGENCY SHUTDOWN PANEL (INDICATOR)

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE 1.97, A5
(ALSO SEE VARIABLES B7, B9, C8, C10, AND D4)

DESCRIPTION:	DRYWELL PRESSURE	INSTALLED RANGE:	5 TO 25 PSIA 0 TO 225 PSIG
REQUIRED RANGE:	-5 PSIG TO 4 TIMES DESIGN PRESSURE (PEACH BOTTOM DESIGN PRESSURE IS 56 PSIG)	ENVIRONMENTAL QUALIFICATION:	YES
CATEGORY:	1	SEISMIC QUALIFICATION:	YES
PURPOSE:	OPERATOR ACTION: CONTROL PRIMARY CONTAINMENT PRESSURE BY ANY OF SEVERAL SYSTEMS, SUCH AS CONTAINMENT PRESSURE CONTROL SYSTEMS, SUPPRESSION POOL SPRAYS, AND DRYWELL SPRAYS.	QUALITY ASSURANCE:	FULL C.A. PLAN
		REDUNDANCY:	2 DIVISIONS
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
	SAFETY FUNCTION: (1) MAINTAIN CONTAINMENT INTEGRITY AND (2) MAINTAIN REACTOR COOLANT SYSTEM INTEGRITY.	PT-8102(9102)A,B,C,D	REACTOR BUILDING
		POWER SUPPLY:	CLASS 1E
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. A6
(ALSO SEE VARIABLE C12)

DESCRIPTION:	CONTAINMENT OXYGEN CONCENTRATION	INSTALLED RANGE:	0 TO 10 VOLUME %
REQUIRED RANGE:	0 TO 10 VOLUME %	ENVIRONMENTAL QUALIFICATION:	YES, EXCEPT THAT THERE IS NOT SUFFICIENT TEST DATA AVAILABLE TO PROVE THE QUALIFICATION OF CERTAIN ANALYZER SOLENOID VALVES AND THE SAMPLE LINE HEAT TRACE DOWNSTREAM OF THE MOISTURE SEPARATOR (SEE MODIFICATIONS 2 AND 3).
CATEGORY:	1	SEISMIC QUALIFICATION:	YES, EXCEPT FOR THE RECORDERS (SEE MODIFICATION 1)
PURPOSE:	OPERATOR ACTION: IF CONTAINMENT ATMOSPHERE APPROACHES THE COMBUSTIBLE LIMITS, INITIATE COMBUSTIBLE GAS CONTROL SYSTEMS. SAFETY FUNCTION: MAINTAIN CONTAINMENT INTEGRITY.	QUALITY ASSURANCE:	FULL Q.A. PLAN
		REDUNDANCY:	2 DIVISIONS FOR DRYWELL ATMOSPHERE 2 DIVISIONS FOR SUPPRESSION POOL ATMOSPHERE
		SENSOR(S): O2E-4963(5963)A,B,C,D MOUNTED WITHIN THE CONTAINMENT ATMOSPHERE DILUTION ANALYZERS	LOCATION: REACTOR BUILDING
		POWER SUPPLY:	CLASS 1E
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

- 1) REPLACE THE CONTROL ROOM RECORDERS WITH SEISMICALLY QUALIFIED RECORDERS (MOD 584C)
- 2) OBTAIN THE NECESSARY QUALIFICATION DOCUMENTATION TO PROVE THE ENVIRONMENTAL QUALIFICATION OF CERTAIN ANALYZER SOLENOID VALVES (MOD 1016), OR REPLACE THE VALVES WITH ENVIRONMENTALLY QUALIFIED VALVES.
- 3) REPLACE THE HEAT TRACE ON THE SAMPLE LINES DOWNSTREAM OF THE MOISTURE SEPARATOR WITH ENVIRONMENTALLY QUALIFIED EQUIPMENT (MOD 1234).

SCHEDULE FOR UPGRADE:

- 1) MOD 584C - UNIT 2: NEXT REFUELING OUTAGE
UNIT 3: NEXT REFUELING OUTAGE
- 2) BY THE END OF THE SECOND REFUELING OUTAGE FOR EACH UNIT FOLLOWING THE SPRING 1984 UNIT 2 REFUELING OUTAGE.
- 3) MOD 1234 - BY THE END OF THE SECOND REFUELING OUTAGE FOR EACH UNIT FOLLOWING THE SPRING 1984 UNIT 2 REFUELING OUTAGE.

VARIABLE NO. B1

DESCRIPTION: NEUTRON FLUX
REQUIRED RANGE: 1 X E-06 % TO 100 % FULL POWER (SRM, APRM)
CATEGORY: 1
PURPOSE: FUNCTION DETECTION;
ACCOMPLISHMENT OF MITIGATION.

THE INFORMATION BELOW SUMMARIZES
THE RANGES FOR THE NEUTRON MONITORING SYSTEMS AS SHOWN IN
FIGURE 7.5.21 OF THE PEACH BOTTOM UPDATED FINAL SAFETY ANALYSIS
REPORT.

SOURCE RANGE MONITORS (SRM)

WITH THE SRM'S FULLY INSERTED; 1) THE LOW RANGE IS SOURCE RANGE
WHICH IS LESS THAN 1 X E-06 % POWER AND 2) THE UPPER RANGE IS
LESS THAN 1 X E-03 % POWER. WITH THE SRM'S FULLY RETRACTED;
1) THE LOW RANGE IS LESS THAN 1 X E-03 % POWER AND 2) THE UPPER
RANGE IS APPROXIMATELY 2.0 % POWER.

INTERMEDIATE RANGE MONITORS (IRM)

THE LOW RANGE OF THE IRM'S IS NEARLY 1 X E-04 % POWER. THE
UPPER RANGE IS APPROXIMATELY 20 % POWER.

AVERAGE POWER RANGE MONITORS (APRM)

THE LOW RANGE IS APPROXIMATELY 1.0 % POWER. THE UPPER RANGE IS
APPROXIMATELY 125 % POWER.

ENVIRONMENTAL QUALIFICATION:

THE NEUTRON MONITORING SYSTEM IS QUALIFIED FOR ATWS CONDITIONS.
NOTE: DURING AN ATWS EVENT, THE SRM'S AND IRM'S MUST BE
INSERTED. THIS INSERTION OCCURS WHILE THE DRYWELL
ENVIRONMENTAL CONDITIONS REMAIN NORMAL. THE INSERTION
EQUIPMENT IS QUALIFIED FOR THE NORMAL DRYWELL ENVIRONMENT. WE
ALSO NOTE THAT SINCE THE ATWS RULE HAS NOT BEEN FINALIZED, A
RIGOROUS EVALUATION OF THE ENVIRONMENT IN THE DRYWELL AND
REACTOR BUILDING HAS NOT BEEN PERFORMED. THE ABOVE ANALYSIS
IS BASED ON OUR JUDGEMENT THAT THE ENVIRONMENT WILL NOT CHANGE
SIGNIFICANTLY FROM NORMAL OPERATING ENVIRONMENTS DURING THE
TIME PERIOD WHICH THIS EQUIPMENT MUST OPERATE. A DETAILED
ANALYSIS WILL BE PERFORMED TO VERIFY THIS ENVIRONMENT WHEN THE
ATWS RULE IS FINALIZED.

SEISMIC QUALIFICATION: NA (SEE EXCEPTION)

QUALITY ASSURANCE: MOST IS QUALITY ASSURED. THE
REMAINDER IS COMMERCIAL GRADE.

REDUNDANCY: MULTIPLE CHANNELS ARRANGED IN
FOUR DIVISIONS FOR BOTH HIGH
RANGE AND LOW RANGE MONITORS.

SENSOR(S):

LOCATION:

LOCAL POWER RANGE MONITORS, DRYWELL
INTERMEDIATE RANGE MONITORS,
SOURCE RANGE MONITORS

POWER SUPPLY:

SOURCE RANGE MONITORS

STATION BATTERIES FOR THE ELECTRONICS; UNINTERRUPTIBLE POWER
(ON-SITE SOURCE BACKED BY STATION BATTERIES) FOR THE RECORDERS;
ON-SITE SOURCE FOR THE DRIVE MOTORS.

INTERMEDIATE RANGE MONITORS

STATION BATTERIES FOR THE ELECTRONICS; UNINTERRUPTIBLE POWER
(ON-SITE SOURCE BACKED BY STATION BATTERIES) FOR THE RECORDERS;
ON-SITE SOURCE FOR THE DRIVE MOTORS.

AVERAGE POWER RANGE MONITORS

REACTOR PROTECTION SYSTEM MOTOR-GENERATOR SET FOR THE
ELECTRONICS; UNINTERRUPTIBLE POWER (ON-SITE SOURCE BACKED BY
STATION BATTERIES) FOR THE RECORDERS.

LOCATION OF DISPLAY:

MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

THE USE OF NEUTRON FLUX INDICATION BY THE OPERATOR HAS BEEN REVIEWED. WE FOUND THAT THE ONLY EVENT THAT WOULD REQUIRE THE LONG TERM MONITORING OF NEUTRON FLUX IS AN ANTICIPATED TRANSIENT WITHOUT SCRAM (ATWS) EVENT. BASED ON OUR UNDERSTANDING OF THE REQUIREMENTS FOR ATWS THAT ARE BEING PROMULGATED IN THE RULEMAKING PROCESS, WE BELIEVE THAT CATEGORY 2 DESIGN AND QUALIFICATION REQUIREMENTS SHOULD BE APPLIED TO NEUTRON FLUX INSTRUMENTATION IN LIEU OF CATEGORY 1 AS SPECIFIED IN REGULATORY GUIDE 1.97. APPLICATION OF CATEGORY 2 REQUIREMENTS WOULD MAKE THESE REQUIREMENTS MORE CONSISTENT WITH THE REQUIREMENTS APPLICABLE TO OTHER ATWS MITIGATION FEATURES. IT IS NOTED THAT DUE TO THE MULTIPLE USES OF THE NEUTRON FLUX INSTRUMENTATION (I.E., IT IS USED IN THE REACTOR PROTECTION SYSTEM AND FOR NORMAL CONTROL ROD MOVEMENT), MOST PORTIONS OF THIS INSTRUMENTATION ARE DESIGNED, PROCURED, INSTALLED, AND TESTED TO STANDARDS MORE STRINGENT THAN CATEGORY 2. HOWEVER, SOME PORTIONS, NOTIBLY THE SRM AND IRM DRIVE MECHANISM AND CONTROLS AND THE NEUTRON MONITORING SYSTEM POWER SOURCES, DO NOT MEET CATEGORY 1 REQUIREMENTS. SINCE THERE IS A LARGE NUMBER OF NEUTRON MONITORING SYSTEM CHANNELS (4 SRM, 8 IRM, AND 6 APRM'S PLUS INDIVIDUAL LPRM CHANNELS) THAT HAVE A PROVEN LEVEL OF HIGH RELIABILITY AND SINCE THE ATWS MITIGATION FEATURES HAVE A LOWER IMPORTANCE TO SAFETY THAN SAFETY SYSTEMS, A CATEGORY 2 CLASSIFICATION FOR NEUTRON FLUX INSTRUMENTATION IS CONSIDERED APPROPRIATE.

MODIFICATIONS PROPOSED:

NONE

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SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. B2

DESCRIPTION:	CONTROL ROD POSITION	INSTALLED RANGE:	FULL-IN OR NOT FULL-IN
REQUIRED RANGE:	FULL-IN OR NOT FULL-IN	ENVIRONMENTAL QUALIFICATION:	NA
CATEGORY:	3	SEISMIC QUALIFICATION:	NA
PURPOSE:	VERIFICATION	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	DIGITAL DISPLAY OR INDICATING LAMPS
		<u>SENSOR(S):</u> POSITION INDICATOR PROBE (1) PER ROD	<u>LOCATION:</u> DRYWELL
		POWER SUPPLY:	UNINTERRUPTIBLE POWER (ON-SITE POWER BACKED BY STATION BATTERIES)
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. B3

DESCRIPTION:	RCS SOLUBLE BORON CONCENTRATION (GRAB SAMPLE)	INSTALLED RANGE:	50 TO 1100 PPM. SEE HGTE 1.
REQUIRED RANGE:	0 TO 1000 PPM	ENVIRONMENTAL QUALIFICATION:	NA
CATEGORY:	3	SEISMIC QUALIFICATIONS:	NA
PURPOSE:	VERIFICATION	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	1 SAMPLE STATION FOR EACH UNIT.
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		POST ACCIDENT SAMPLING STATION	RADWASTE BUILDING
		POWER SUPPLY:	ONSITE AND OFFSITE SOURCES
		LOCATION OF DISPLAY:	ONSITE OR OFFSITE LAB ANALYSIS

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

NOTES:

- 1) ADDITIONAL INFORMATION CONCERNING PEACH BOTTOM'S POST ACCIDENT SAMPLING AND ANALYSIS PROVISIONS HAS PREVIOUSLY BEEN PROVIDED TO THE NRC IN A LETTER FROM S.L. DALTROFF (PECO) TO J.F. STOLZ (NRC) DATED 1/31/83, SUBJECT: POST ACCIDENT SAMPLING.
NRC ACCEPTANCE OF PEACH BOTTOM'S POST ACCIDENT SAMPLING PROVISIONS HAS BEEN DOCUMENTED IN A LETTER FROM J.F. STOLZ (NRC) TO E.G. BAUER (PECO) DATED 10/6/83, SUBJECT: POST ACCIDENT SAMPLING.

VARIABLE NO. B4
(ALSO SEE VARIABLE A2)

DESCRIPTION:	COOLANT LEVEL IN REACTOR VESSEL	INSTALLED RANGE:	-325" TO 0" -165" TO +50"
REQUIRED RANGE:	BOTTOM OF CORE SUPPORT PLATE (-331" AT PEACH BOTTOM) TO LESSER OF TOP OF VESSEL OR CENTERLINE OF MAIN STEAM LINE (CENTERLINE OF THE MAIN STEAM LINE AT PEACH BOTTOM IS +114"). (1)	ENVIRONMENTAL QUALIFICATION:	YES
		SEISMIC QUALIFICATION:	YES
CATEGORY:	1		
PURPOSE:	FUNCTION DETECTION; ACCOMPLISHMENT OF MITIGATION; LONG-TERM SURVEILLANCE.	QUALITY ASSURANCE:	FULL Q.A. PLAN
		REDUNDANCY:	4 CHANNELS (2 DIVISIONS)
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		LT-2(3)-2-3-110 A,B	REACTOR BUILDING
		LT-2(3)-2-3-111 A,B	REACTOR BUILDING
		POWER SUPPLY:	CLASS 1E
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

NOTE 3:

1) SECTION D OF R.G. 1.97, REVISION 2, STATES, "PLANTS CURRENTLY OPERATING SHOULD MEET THE PROVISIONS OF THIS GUIDE, EXCEPT AS MODIFIED BY NUREG-0737..." THE INSTALLED RANGE IS IN COMPLIANCE WITH NUREG-0737, ITEM II.F.2. IN LIEU OF TABLE 1 OF REGULATORY GUIDE 1.97. THE NUREG 0737 REQUIREMENT IS TO MEASURE FROM THE BOTTOM OF ACTIVE FUEL (AT PEACH BOTTOM, THE BOTTOM OF ACTIVE FUEL IS -322") TO ABOVE NORMAL WATER LEVEL (AT PEACH BOTTOM, NORMAL WATER LEVEL IS +23").

VARIABLE NO. B5
(ALSO SEE VARIABLE C3)

DESCRIPTION:	BWR CORE TEMPERATURE	ALLOWED RANGE:	SEE EXCEPTION BELOW
REQUIRED RANGE:	200-2300 DEGREES F	ENVIRONMENTAL QUALIFICATION:	
CATEGORY:	UNCLASSIFIED	SEISMIC QUALIFICATION:	
PURPOSE:	TO PROVIDE DIVERSE INDICATION OF WATER LEVEL.	QUALITY ASSURANCE:	
		REDUNDANCY:	
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		POWER SUPPLY:	
		LOCATION OF DISPLAY:	

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

IMPLEMENTATION OF THE REQUIREMENTS FOR THIS VARIABLE IS NOT NECESSARY BASED ON THE REPORTS BY THE BWR OWNERS' GROUP. THESE REPORTS, SLI-8212 AND SLI-8218 PROVIDE THE JUSTIFICATION.

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. B6
(ALSO SEE VARIABLES A1, C4, AND C9)

DESCRIPTION:	RCS PRESSURE	INSTALLED RANGE:	PT-2(3)-6-105; 0-1500 PSIG PT-2(3)-6-53A,B,C; 0-1200 PSIG
REQUIRED RANGE:	0 TO 1500 PSIG	ENVIRONMENTAL QUALIFICATION:	NO
CATEGORY:	1	SEISMIC QUALIFICATION:	NO
PURPOSE:	FUNCTION DETECTION;ACCOMPLISHMENT OF MITIGATION;VERIFICATION.	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	MULTI-CHANNEL
		<u>SENSOR(S):</u> PT-2(3)-6-105 PT-2(3)-6-53A,B,C	<u>LOCATION:</u> REACTOR BUILDING REACTOR BUILDING
		POWER SUPPLY:	UNINTERRUPTIBLE POWER (ONSITE SOURCE BACKED BY STATION BATTERIES)
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

A MODIFICATION HAS BEEN INITIATED TO INSTALL INSTRUMENTATION WHICH IS ENVIRONMENTALLY AND SEISMICALLY QUALIFIED AND IS POWERED BY CLASS 1E POWER SOURCES. ALL OTHER REQUIREMENTS FOR CATEGORY 1 INSTRUMENTATION WILL BE INCORPORATED INTO THE MODIFICATION (MODIFICATION 893B).

SCHEDULE FOR UPGRADE:

UNIT 2 INSTALLATION - NEXT REFUELING OUTAGE.

UNIT 3 INSTALLATION - NEXT REFUELING OUTAGE.

VARIABLE NO. B7
(ALSO SEE VARIABLES A5, B9, C8, C10, AND D4)

DESCRIPTION:	DRYWELL PRESSURE	INSTALLED RANGE:	5 TO 25 PSIA 0 TO 225 PSIG
REQUIRED RANGE:	0 TO DESIGN PRESSURE (PEACH BOTTOM DESIGN PRESSURE IS 56 PSIG)	ENVIRONMENTAL QUALIFICATION:	YES
CATEGORY:	1	SEISMIC QUALIFICATION:	YES
PURPOSE:	FUNCTION DETECTION;ACCOMPLISHMENT OF MITIGATION;VERIFICATION.	QUALITY ASSURANCE:	FULL Q.A. PLAN
		REDUNDANCY:	2 DIVISIONS
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		PT-8102(9102)A,B,C,D	REACTOR BUILDING
		POWER SUPPLY:	CLASS 1E
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. B6
(ALSO SEE VARIABLE C6)

DESCRIPTION:	DRYWELL SUMP LEVEL (AT PEACH BOTTOM, THIS IS THE EQUIPMENT DRAIN SUMP AND FLOOR DRAIN SUMP)	INSTALLED RANGE:	ANNUNCIATOR ALARM FOR HIGH-HIGH LEVEL FOR BOTH THE EQUIPMENT DRAIN SUMP AND FLOOR DRAIN SUMP
REQUIRED RANGE:	TOP TO BOTTOM	ENVIRONMENTAL QUALIFICATION:	NO, SEE EXCEPTION BELOW
CATEGORY:	1	SEISMIC QUALIFICATION:	NO, SEE EXCEPTION BELOW
PURPOSE:	FUNCTION DETECTION; ACCOMPLISHMENT OF MITIGATION; VERIFICATION.	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	1 CHANNEL FOR EACH SUMP
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		LE-2(3)-20-351	DRYWELL
		LE-2(3)-20-360	DRYWELL
		POWER SUPPLY:	ONSITE
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

PEACH BOTTOM HAS TWO DRYWELL DRAIN SUMPS. ONE DRAIN IS THE EQUIPMENT DRAIN SUMP, WHICH COLLECTS IDENTIFIED LEAKAGE; THE OTHER IS THE FLOOR DRAIN SUMP, WHICH COLLECTS UNIDENTIFIED LEAKAGE. ALTHOUGH THE LEVEL OF THE DRAIN SUMPS CAN BE A DIRECT INDICATION OF BREACH OF THE REACTOR COOLANT SYSTEM PRESSURE BOUNDARY, THE INDICATION IS AMBIGUOUS BECAUSE THERE IS WATER IN THOSE SUMPS DURING NORMAL OPERATION. THERE IS OTHER INSTRUMENTATION REQUIRED BY REGULATORY GUIDE 1.97 THAT WOULD INDICATE LEAKAGE IN THE DRYWELL:

1. DRYWELL PRESSURE--VARIABLE B7, CATEGORY 1
2. DRYWELL TEMPERATURE--VARIABLE D7, CATEGORY 2
3. PRIMARY CONTAINMENT AREA RADIATION--VARIABLE C5, CATEGORY 3

THE DRYWELL-SUMP-LEVEL SIGNAL NEITHER AUTOMATICALLY INITIATES SAFETY-RELATED SYSTEMS NOR ALERTS THE OPERATOR TO THE NEED TO TAKE SAFETY-RELATED ACTIONS. BOTH SUMPS HAVE A LEVEL SWITCH THAT PROVIDES A HIGH-HIGH LEVEL ALARM IN THE MAIN CONTROL ROOM AND A RECORDER THAT INDICATES TOTAL FLOW FROM THE SUMP. THE AMOUNT OF LEAKAGE CAN BE DETERMINED BY THE TIME VS.FLOW PLOT FROM THE RECORDER.

REGULATORY GUIDE 1.97 REQUIRES INSTRUMENTATION TO FUNCTION DURING AND AFTER AN ACCIDENT. THE DRYWELL SUMP SYSTEMS ARE DELIBERATELY ISOLATED AT THE PRIMARY CONTAINMENT PENETRATION UPON RECEIPT OF AN ACCIDENT SIGNAL TO ESTABLISH CONTAINMENT INTEGRITY. THIS FACT RENDERS THE DRYWELL-SUMP-LEVEL SIGNAL IRRELEVANT. THEREFORE, BY DESIGN, DRYWELL-SUMP-LEVEL INSTRUMENTATION SERVES NO USEFUL ACCIDENT-MONITORING FUNCTION.

THE EMERGENCY OPERATING PROCEDURES USE REACTOR LEVEL AND DRYWELL PRESSURE AS ENTRY CONDITIONS FOR THE LEVEL CONTROL GUIDELINE. A SMALL LINE BREAK WILL CAUSE THE DRYWELL PRESSURE TO INCREASE BEFORE A NOTICEABLE INCREASE IN THE SUMP LEVEL. THEREFORE, THE DRYWELL SUMPS WILL PROVIDE A "LAGGING" VERSUS "EARLY" INDICATION OF A LEAK.

BASED ON THE ABOVE DISCUSSION, THE EXISTING CATEGORY 3 SUMP LEVEL INSTRUMENTATION IS ADEQUATE.

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. B9
(ALSO SEE VARIABLES A5, B7, C8, C10, AND D4)

DESCRIPTION:	PRIMARY CONTAINMENT PRESSURE	INSTALLED RANGE:	5 TO 25 PSIA 0 TO 225 PSIG
REQUIRED RANGE:	-5 PSIG TO DESIGN PRESSURE (PEACH BOTTOM DESIGN PRESSURE IS 56 PSIG)	ENVIRONMENTAL QUALIFICATION:	YES
CATEGORY:	1	SEISMIC QUALIFICATION:	YES
PURPOSE:	FUNCTION DETECTION;ACCOMPLISHMENT OF MITIGATION;VERIFICATION.	QUALITY ASSURANCE:	FULL Q.A. PLAN
		REDUNDANCY:	2 DIVISIONS
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		PT-8102(9102)A,B,C,D	REACTOR BUILDING
		POWER SUPPLY:	CLASS 1E
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. B10

DESCRIPTION:	PRIMARY CONTAINMENT ISOLATION VALVE POSITION (EXCLUDING CHECK VALVES)	INSTALLED RANGE:	LIGHTS WHICH INDICATE WHETHER THE VALVE IS CLOSED OR NOT CLOSED.
REQUIRED RANGE:	CLOSED - NOT CLOSED	ENVIRONMENTAL QUALIFICATION:	SEE TABLE BELOW.
CATEGORY:	1	SEISMIC QUALIFICATION:	SEE TABLE BELOW AND GENERAL EXCEPTION 2.
PURPOSE:	ACCOMPLISHMENT OF ISOLATION	QUALITY ASSURANCE:	SEE TABLE BELOW.
		REDUNDANCY:	ONE CHANNEL PER VALVE (SEE GENERAL EXCEPTION 1).
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		VALVE LIMIT SWITCHES (FOR DIRECT POSITION INDICATION) OR VALVE CONTROL CIRCUIT (FOR INDIRECT POSITION INDICATION) ASSOCIATED WITH THE VALVES LISTED IN THE TABLE BELOW. THE ENTRIES IN THE TABLE APPLY TO THE POSITION INDIC- ATION PORTION OF THE VALVE ONLY. THE FIRST VALVE NUMBER IS THE UNIT 2 VALVE, THE BRACKETED VALVE NUMBER IS THE IDENTICAL VALVE ON UNIT 3.	FOR VALVES WITH DIRECT POSITION INDICATION: THE VALVE LIMIT SWITCHES ARE LOCATED IN THE DRYWELL AND REACTOR BUILDING. FOR VALVES WITH INDIRECT POSITION INDICATION: THE VALVE CONTROL CIRCUIT IS LOCATED IN THE CABLE SPREADING ROOM OR MAIN CONTROL ROOM WITH THE EXCEPTION OF RELAYS ASSOCIATED WITH SOLENOID VALVES SV-2671 A THRU G, SV-2980 AND SV-2978 A THRU G (IDENTICAL VALVES EXIST ON UNIT 3) WHICH ARE LOCATED IN THE REACTOR BUILDING.
		POWER SUPPLY:	SEE TABLE BELOW
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

<u>PENETRATION #</u>	<u>VALVE #</u>	<u>LINE DESCRIPTION</u>	<u>QUALIFICATION SEISMIC/ENV.</u>	<u>POWER SUPPLY(1)</u>	<u>Q.A.</u>	<u>CABLE ROUTE & IND.(2)(3)</u>	<u>MOD.A.#/OR EXCEPT.(4)</u>
N-7 A TO D	AO-2(3)-2-80A,B,C,D	MAIN STEAM	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-7 A TO D	AO-2(3)-2-86A,B,C,D	MAIN STEAM	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-8	MO-2(3)-2-74	MAIN STEAM DRAIN	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-8	MO-2(3)-2-77	MAIN STEAM DRAIN	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-9A	MO-2(3)-2-38A	FEEDWATER (STARTUP RECIRC.)	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-9A	MO-2(3)-23-19	FEEDWATER (HPCI)	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-9A	MANUAL VALVE (NO DESIG.)	FEEDWATER (INSTRUMENT, 9 LINES)	-	-	-	N	E4
N-9B	MO-2(3)-13-21	FEEDWATER (RCIC)	YES/UNKNOWN	CLASS 1E	FULL Q.A.	S,D	M1
N-9B	MO-2(3)-12-68	FEEDWATER (RWCU)	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-9B	MO-2(3)-2-38B	FEEDWATER (STARTUP-RECIRC)	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-10	MO-2(3)-13-15	STEAM TO RCIC TURBINE	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-10	MO-2(3)-13-16	STEAM TO RCIC TURBINE	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-11	MO-2(3)-23-15	STEAM TO HPCI TURBINE	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-11	MO-2(3)-23-16	STEAM TO HPCI TURBINE	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-11	AO-4807(5807)	STEAM TO HPCI TURBINE	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3
N-12	MO-2(3)-10-17	RHR SHUTDOWN COOLING SUCTION	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-12	MO-2(3)-10-18	RHR SHUTDOWN COOLING SUCTION	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-13 A,B	MO-2(3)-10-25A,B	RHR SHUTDOWN COOLING RETURN & LPCI INJECTION	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE

<u>PENETRATION #</u>	<u>VALVE #</u>	<u>LINE DESCRIPTION</u>	<u>QUALIFICATION SEISMIC/ENV.</u>	<u>POWER SUPPLY(1)</u>	<u>Q.A. COMMERCIAL GRADE</u>	<u>CABLE ROUTE & IND.(2)(3)</u>	<u>MOD. AND/OR EXCEPT.(4)</u>
N-13 A,B	AO-2(3)-10-163A,B	RHR SHUTDOWN COOLING RETURN & LFCI INJECTION	NO/NO	CLASS 1E		S,D	M3
N-14	MO-12-15	RWCU PUMP SUCTION	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-14	MO-2(3)-12-18	RWCU PUMP SUCTION	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-16 A,B	MO-2(3)-14-12A,B	CORE SPRAY PUMP DISCHARGE	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-16 A,B	AO-2(3)-14-15A,B	CORE SPRAY PUMP DISCHARGE	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3
N-17	MO-2(3)-10-32	RHR HEAD SPRAY	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-17	MO-2(3)-10-33	RHR HEAD SPRAY	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-18	AO-2(3)-20-82	DRYWELL FLOOR DRAIN PUMP DISCH.	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3
N-18	AO-2(3)-20-83	DRYWELL FLOOR DRAIN PUMP DISCH.	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3
N-19	AO-2(3)-20-94	DRYWELL EQUIP. DRAIN PUMP DISCH.	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3
N-19	AO-2(3)-20-95	DRYWELL EQUIP. DRAIN PUMP DISCH.	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3
N-21	2 MANUAL VALVES (NO DESIG.)	SERVICE AIR SUPPLY -	-	-	-	N	E4
N-22	AO-2969A(3969A)	INST.GAS SUPPLY	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3
N-23	MO-2373(3373)	RBCW TO RECIRC. PUMPS	YES/UNKNOWN	CLASS 1E	COMMERCIAL GRADE	S,D	M2
N-24	MO-2374(3374)	RBCW FROM RECIRC. PUMPS	YES/UNKNOWN	CLASS 1E	COMMERCIAL GRADE	S,D	M2
N-25 & 205B	AO-2505(3505)	DRYWELL AND TORUS PURGE SUPPLY (PURGE)	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3
N-25 & 205B	AO-2519(3519)	DRYWELL AND TORUS PURGE SUPPLY (PURGE)	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3

<u>PENETRATION #</u>	<u>VALVE #</u>	<u>LINE DESCRIPTION</u>	<u>QUALIFICATION SEISMIC/ENV.</u>	<u>POWER SUPPLY(1)</u>	<u>Q.A.</u>	<u>CABLE ROUTE & INO.(2)(3)</u>	<u>MOD. AND/OR EXCEPT.(4)</u>
N-25 & 205B	AO-2520(3520)	DRYWELL AND TORUS PURGE SUPPLY (PURGE)	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3
N-25 & 205B	AO-2521A,B(3521A,B)	DRYWELL AND TORUS PURGE SUPPLY (PURGE)	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3
N-25 & 205B	AO-2523(3523)	DRYWELL AND TORUS PURGE SUPPLY (N2 SUPPLY)	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3
N-25 & 205B	AO-2502A(3502A)	DRYWELL AND TORUS PURGE SUPPLY (VAC. RELIEF)	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3
N-25 & 205B	MANUAL VALVE (NO DESIG.)	DRYWELL AND TORUS PURGE SUPPLY (INST. PRESS.)	-	-	-	N	E4
N-26	AO-2509(3509)	DRYWELL PURGE EXHAUST(CAD)	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3
N-26	AO-2510(3510)	DRYWELL PURGE EXHAUST(CAD)	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3
N-26	AO-2506(3506)	DRYWELL PURGE EXHAUST(PURGE)	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3
N-26	AO-2507(3507)	DRYWELL PURGE EXHAUST(PURGE)	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3
N-26	AO-4235(5235)	DRYWELL PURGE EXHAUST(INST.GAS)	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3
N-26	SV-8100(9100)	DRYWELL PURGE EXHAUST(INST.GAS)	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-26	SV-26716(36716)	DRYWELL PURGE EXHAUST (CACS SAMPLE)	YES/NO	CLASS 1E	FULL Q.A.	S,I	M5,E3
N-26	SV-29786(39786)	DRYWELL PURGE EXHAUST (CACS SAMPLE)	YES/NO	CLASS 1E	FULL Q.A.	S,I	M5,E3
N-26	SV-4960B(5960B)	DRYWELL PURGE EXHAUST (CAD SAMPLE)	-	-	-	N	M4,E3

<u>PENETRATION #</u>	<u>VALVE #</u>	<u>LINE DESCRIPTION</u>	<u>QUALIFICATION SEISMIC/ENV.</u>	<u>POWER SUPPLY(1)</u>	<u>Q.A.</u>	<u>CABLE ROUTE & IND.(2)(3)</u>	<u>MOD.AND/OR EXCEPT.(4)</u>
N-26	SV-4961B(5961B)	DRYWELL PURGE EXHAUST (CAD SAMPLE)	-	-	-	N	M4,E3
N-26	SV-4966B(5966B)	DRYWELL PURGE EXHAUST (RAD.GAS SAMPLE)	YES/YES	CLASS 1E	FULL Q.A.	S,I	E3
N-26	SV-8101(9101)	DRYWELL PURGE EXHAUST (RAD.GAS SAMPLE)	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-26	MANUAL VALVE (NO DESIG.)	DRYWELL PURGE EXHAUST (INST. PRESS.)	-	-	-	N	E4
N-32 C,D	2 MANUAL VALVES (NO DESIG.)	ILRT CONNECTIONS	-	-	-	N	E4
N-33F	MANUAL VALVE (NO DESIG.)	INST. LINE-DRYWELL PRESSURE	-	-	-	N	E4
N-35 A TO E	BALL VALVE (NO DESIG.) TYPICAL FOR ALL TIP DRIVES		NO/NO	CLASS 1E FOR THE INDICATION ON MAIN CONTROL ROOM PANEL 9-3 AND ONSITE FOR THE INDICATION ON 9-13 PANEL.	COMMERCIAL GRADE	PS,D	E1
N-35 A TO E	SHEAR VALVE(NO DESIG.) TYPICAL FOR ALL TIP DRIVES		NO/NO	CLASS 1E FOR THE INDICATION ON MAIN CONTROL ROOM PANEL 9-3 AND ONSITE FOR THE INDICATION ON 9-13 PANEL.	COMMERCIAL GRADE	PS,D	E1
N-35F	SV-2(3)-7-113	TIP PURGE	NO/YES	ONSITE	COMMERCIAL GRADE	NS,I	E1,E3
N-37 A TO D	HYDRAULIC CONTROL UNIT CONSISTING OF THE FOLLOWING VALVES:	CRD INSERT					
	CV-2(3)-3-13-126		NO/NO	ONSITE	COMMERCIAL GRADE	NS,D	E2

<u>PENETRATION #</u>	<u>VALVE #</u>	<u>LINE DESCRIPTION</u>	<u>QUALIFICATION SEISMIC/ENV.</u>	<u>POWER SUPPLY(1)</u>	<u>Q.A.</u>	<u>CABLE ROUTE & IND.(2)(3)</u>	<u>MOD.AND/OR EXCEPT.(4)</u>
	SV-2(3)-3-13-120		NO/YES	A COMBINATION OF ONSITE POWER AND UNINTERRUPTIBLE POWER(ONSITE SOURCE BACKED BY STATION BATTERIES).	COMMERCIAL GRADE	NS,I	E2,E3
	SV-2(3)-3-13-123		NO/YES	A COMBINATION OF ONSITE POWER AND UNINTERRUPTIBLE POWER(ONSITE SOURCE BACKED BY STATION BATTERIES).	COMMERCIAL GRADE	NS,I	E2,E3
N-38 A TO D	HYDRAULIC CONTROL UNIT CONSISTING OF THE FOLLOWING VALVES:	CRD WITHDRAWAL					
	SV-2(3)-3-13-122		NO/YES	A COMBINATION OF ONSITE POWER AND UNINTERRUPTIBLE POWER(ONSITE SOURCE BACKED BY STATION BATTERIES).	COMMERCIAL GRADE	NS,I	E2,E3
	SV-2(3)-3-13-121		NO/YES	A COMBINATION OF ONSITE POWER AND UNINTERRUPTIBLE POWER(ONSITE SOURCE BACKED BY STATION BATTERIES).	COMMERCIAL GRADE	NS,I	E2,E3
	CV-2(3)-3-13-127		NO/NO	ONSITE	COMMERCIAL GRADE	NS,D	E2
N-38 A TO D	CV-2(3)-3-32A,B	CRD WITHDRAWAL	NO/NO	CLASS 1E	COMMERCIAL GRADE	NS,D	E2
N-38 A TO D	CV-2(3)-3-33	CRD WITHDRAWAL	NO/NO	CLASS 1E	COMMERCIAL GRADE	NS,D	E2
N-38 A TO D	CV-2(3)-3-35A,B	CRD WITHDRAWAL	NO/NO	ONSITE	COMMERCIAL GRADE	S,D	E2
N-38 A TO D	CV-2(3)-3-36	CRD WITHDRAWAL	NO/NO	ONSITE	COMMERCIAL GRADE	S,D	E2
N-39 A,B	MO-2(3)-10-31A,B	RHR CONTAINMENT SPRAY (RHR)	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE

<u>PENETRATION #</u>	<u>VALVE #</u>	<u>LINE DESCRIPTION</u>	<u>QUALIFICATION SEISMIC/ENV.</u>	<u>POWER SUPPLY(1)</u>	<u>Q.A.</u>	<u>CABLE ROUTE & IND.(2)(3)</u>	<u>MOD.AND/OR EXCEPT.(4)</u>
N-39 A,B	MO-2(3)-10-26A,B	RHR CONTAINMENT SPRAY (RHR)	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-39 A,B	SV-4949A,B(5949A,B)	RHR CONTAINMENT SPRAY (CAD)	-	-	-	N	M4,E3
N-41	AO-2(3)-2-39	RECIRC. LOOP SAMPLE	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3
N-41	AO-2(3)-2-40	RECIRC. LOOP SAMPLE	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3
N-46 A,B	3-10-53A,C (MANUAL VALVE)	INST.LINES-UNIT 3, DRYWELL PRESSURE	-	-	-	N	E4
N-46 A,B	3-10-60A,C (MANUAL VALVE)	INST.LINES-UNIT 3, DRYWELL PRESSURE	-	-	-	N	E4
N-47	SV-8130B(9130B)	ADS SAFETY GRADE PNEUMATIC SUPPLY	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-49 B,C	3-10-53B,D (MANUAL VALVE)	INST.LINES-UNIT 3, DRYWELL PRESSURE	-	-	-	N	E4
N-49 B,C	3-10-60B,D (MANUAL VALVE)	INST.LINES-UNIT 3, DRYWELL PRESSURE	-	-	-	N	E4
N-49 E,F	2-10-53A,C (MANUAL VALVE)	INST.LINES-UNIT 2, DRYWELL PRESSURE	-	-	-	N	E4
N-49 E,F	2-10-60A,C (MANUAL VALVE)	INST.LINES-UNIT 2, DRYWELL PRESSURE	-	-	-	N	E4
N-50A	2(3)-305A MANUAL VALVE	INST. LINES-RECIRC.SUCTION PRESSURE	-	-	-	N	E4
N-50 B,C	MANUAL VALVE (NO DESIG.)	INST. LINES-RCIC STEAM PRESSURE	-	-	-	N	E4
N-50 B,C	2(3)-54A,B (MANUAL VALVE)	INST.LINES-RCIC STEAM PRESSURE	-	-	-	N	E4
N-51 A,B	SV-2671D,E(3671D,E)	CACS SAMPLE LINES	YES/NO	CLASS 1E	FULL Q.A.	S,I	M5,E3

<u>PENETRATION #</u>	<u>VALVE #</u>	<u>LINE DESCRIPTION</u>	<u>QUALIFICATION SEISMIC/ENV.</u>	<u>POWER SUPPLY(1)</u>	<u>Q.A.</u>	<u>CABLE ROUTE & IND.(2)(3)</u>	<u>MOD. AND/OR EXCEPT.(4)</u>
N-51 A,B	SV-2978D,E(3978D,E)	CACS SAMPLE LINES	YES/NO	CLASS 1E	FULL Q.A.	S,I	M5,E3
N-51C	SV-2671C(3671C)	CACS SAMPLE LINES (CACS)	YES/NO	CLASS 1E	FULL Q.A.	S,I	M5,E3
N-51C	SV-2978C(3978C)	CACS SAMPLE LINES (CACS)	YES/NO	CLASS 1E	FULL Q.A.	S,I	M5,E3
N-51C	SV-4960C(5960C)	CACS SAMPLE LINES (CAD)	-	-	-	N	M4,E3
N-51C	SV-4961C(5961C)	CACS SAMPLE LINES (CAD)	-	-	-	N	M4,E3
N-51C	SV-4966C(5966C)	CACS SAMPLE LINES(RAD.GAS)	YES/YES	CLASS 1E	FULL Q.A.	S,I	E3
N-51C	SV-8101(9101)	CACS SAMPLE LINES(RAD.GAS SAMPLE)	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-51D	SV-2980(3980)	CACS SAMPLE RETURN	YES/NO	CLASS 1E	FULL Q.A.	S,I	M5,E3
N-52F	AO-2969B(3969B)	INST. GAS SUPPLY	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3
N-53	MO-2201B(3201B)	CHILLED WATER FROM DRYWELL COOLERS, LOOP A	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-54	MO-2200B(3200B)	CHILLED WATER FROM DRYWELL COOLERS, LOOP B	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-55	MO-2200A(3200A)	CHILLED WATER TO DRYWELL COOLERS, LOOP B	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-56	MO-2201A(3201A)	CHILLED WATER TO DRYWELL COOLERS, LOOP A	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-57	AO-2(3)-2-316	MAIN STEAM LINE 'D' SAMPLE	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3
N-57	AO-2(3)-2-317	MAIN STEAM LINE 'D' SAMPLE	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3

PENETRATION #	VALVE #	LINE DESCRIPTION	QUALIFICATION SEISMIC/ENV.	POWER SUPPLY(1)	Q.A.	CABLE ROUTE & IND.(2)(3)	MOD.AND/OR EXCEPT.(4)
N-102BA,BB	2-53B,D (MANUAL VALVE)	INST. LINE- UNIT 2, DRYWELL PRESSURE	-	-	-	N	E4
N-102BA,BB	2-60B,D (MANUAL VALVE)	INST. LINE- UNIT 2, DRYWELL PRESSURE	-	-	-	N	E4
N-102BC	SV-8130A(9130A)	ADS SAFETY GRADE PNEUMATIC SUPPLY	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-102BA	2 MANUAL VALVES (NO DESIG.)	BREATHING AIR- UNIT 3	-	-	-	N	E4
N-203	SV-2671B(3671B)	CACS & CAD SAMPLE LINE (CACS)	YES/NO	CLASS 1E	FULL Q.A.	S,I	M5,E3
N-203	SV-2978B(3978B)	CACS & CAD SAMPLE LINE (CACS)	YES/NO	CLASS 1E	FULL Q.A.	S,I	M5,E3
N-203	SV-4960D(5960D)	CACS & CAD SAMPLE LINE (CAD)	-	-	-	N	M4,E3
N-203	SV-4961D(5961D)	CACS & CAD SAMPLE LINE (CAD)	-	-	-	N	M4,E3
N-203	SV-4966D(5966D)	CACS & CAD SAMPLE LINE (RAD.GAS)	YES/YES	CLASS 1E	FULL Q.A.	S,I	E3
N-203	SV-8101(9101)	CACS & CAD SAMPLE LINE (RAD.GAS SAMPLE)	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-203	MANUAL VALVE (NO DESIG.)	CACS & CAD SAMPLE LINE (INST.)	-	-	-	N	E4
N-205A	AO-2502B(3502B)	TORUS VACUUM BREAKER	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3
N-205A	MANUAL VALVE (NO DESIG.)	TORUS VACUUM BREAKER	-	-	-	N	E4
N-206 A,B	MANUAL VALVE (NO DESIG.)	INST. LINES- TORUS LEVEL	-	-	-	N	E4
N-210 A,B	MO-2(3)-10-34A,B	RHR TEST & POOL COOLING RETURN	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-211 A,B	MO-2(3)-10-38A,B	RHR TORUS SPRAY (RHR)	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE

PENETRATION #	VALVE #	LINE DESCRIPTION	QUALIFICATION SEISMIC/ENV.	POWER SUPPLY(1) CLASS 1E	Q.A. FULL Q.A.	CABLE ROUTE & IND.(2)(3)	MOD.AND/OR EXCEPT.(4)
N-211 A,B	MO-2(3)-10-39A,B	RHR TORUS SPRAY (RHR)	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-211 A,B	MO-2(3)-10-34A,B	RHR TORUS SPRAY (RHR)	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-211 A,B	SV-4951A,E(5951A,B)	RHR TORUS SPRAY (CAD)	-	-	-	N	M4,E3
N-212,214,217B	AG-4240(5240)	HPCI & RCIC TURBINE EXHAUST (RCIC)	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3
N-212,214,217B	AO-4241(5241)	HPCI & RCIC TURBINE EXHAUST (RCIC)	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3
N-212,214,217B	AO-4247(5247)	HPCI & RCIC TURBINE EXHAUST (HPCI)	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3
N-212,214,217B	AO-4248(5248)	HPCI & RCIC TURBINE EXHAUST (HPCI)	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3
N-212,214,217B	MO-4244(5244)	HPCI & RCIC TURBINE EXHAUST (VAC.RELIEF)	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-212,214,217B	MO-4244A(5244A)	HPCI & RCIC TURBINE EXHAUST (VAC.RELIEF)	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-213A	MANUAL VALVE (NO DESIG.)	TORUS DRAIN (WITH LEVEL INST.)	-	-	-	N	E4
N-215	MANUAL VALVE (NO DESIG.)	INST. LINE-UNIT 2, TORUS LEVEL	-	-	-	N	E4
N-218A	AO-2968(3968)	INST. GAS SUPPLY	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3
N-218B	SV-2671A(3671A)	CACS SAMPLE LINE	YES/NO	CLASS 1E	FULL Q.A.	S,I	M5,E3
N-218B	SV-2978A(3978A)	CACS SAMPLE LINE	YES/NO	CLASS 1E	FULL Q.A.	S,I	M5,E3
N-218C	2 MANUAL VALVES (NO DESIG.)	ILRT CONNECTION	-	-	-	N	E4
N-219	AO-2511(3511)	TORUS PURGE EXHAUST(CACS)	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3

<u>PENETRATION #</u>	<u>VALVE #</u>	<u>LINE DESCRIPTION</u>	<u>QUALIFICATION SEISMIC/ENV.</u>	<u>POWER SUPPLY(1)</u>	<u>Q.A.</u>	<u>CABLE ROUTE & IND.(2)(3)</u>	<u>MOD.AND/OR EXCEPT.(4)</u>
N-219	AO-2512(3512)	TORUS PURGE EXHAUST(CACS)	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3
N-219	AO-2513(3513)	TORUS PURGE EXHAUST(CAD)	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3
N-219	AO-2514(3514)	TORUS PURGE EXHAUST(CAD)	NO/NO	CLASS 1E	COMMERCIAL GRADE	S,D	M3
N-219	SV-2671F(3671F)	TORUS PURGE EXHAUST(CACS ANAL.)	YES/NO	CLASS 1E	FULL Q.A.	S,I	M5,E3
N-219	SV-2978F(3978F)	TORUS PURGE EXHAUST(CACS ANAL.)	YES/NO	CLASS 1E	FULL Q.A.	S,I	M5,E3
N-219	SV-4960A(5960A)	TORUS PURGE EXHAUST(CAD ANAL.)	-	-	-	N	M4,E3
N-219	SV-4961A(5961A)	TORUS PURGE EXHAUST(CAD ANAL.)	-	-	-	N	M4,E3
N-219	SV-4966A(5966A)	TORUS PURGE EXHAUST(RAD.GAS)	YES/YES	CLASS 1E	FULL Q.A.	S,I	E3
N-219	SV-6101(9101)	TORUS PURGE EXHAUST(RAD.GAS SAMPLE)	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-219	MANUAL VALVE (NO DESIG.)	TORUS PURGE EXHAUST(INST. PRESSURE)	-	-	-	N	E4
N-224	MO-2(3)-14-26A	CORE SPRAY TEST LINE-UNIT 2	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-225	MO-2(3)-13-41	RCIC & TORUS WATER CLEANUP SUCTION	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-225	MO-2(3)-14-70	RCIC & TORUS WATER CLEANUP SUCTION	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-225	MO-2(3)-14-71	RCIC & TORUS WATER CLEANUP SUCTION	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE

<u>PENETRATION #</u>	<u>VALVE #</u>	<u>LINE DESCRIPTION</u>	<u>QUALIFICATION SEISMIC/ENV.</u>	<u>POWER SUPPLY(1)</u>	<u>Q.A.</u>	<u>CABLE ROUTE & IND.(2)(3)</u>	<u>MOD.AND/OR EXCEPT.(4)</u>
N-226 A TO D	MO-2(3)-10-13A,B,C,D	RHR PUMP SUCTION	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-226 A TO D	RV-2(3)-10-72A,B,C,D	RHR PUMP SUCTION	-	-	-	N	E5
N-227	MO-2(3)-23-58	HPCI PUMP SUCTION	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-228 A TO D	MO-2(3)-14-7A,B,C,D	CORE SPRAY PUMP SUCTION	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-233	MO-2-23-31	HPCI TEST LINE-UNIT 2	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-234	MO-2-14-26B	CORE SPRAY TEST LINE- UNIT 2	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-234A	MO-3-14-26B	CORE SPRAY TEST LINE- UNIT 3	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-234B	MO-3-14-26A	CORE SPRAY TEST LINE- UNIT 3	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-235	MO-3-23-31	HPCI TEST LINE-UNIT 3	YES/YES	CLASS 1E	FULL Q.A.	S,D	NONE
N-250	MANUAL VALVE (NO DESIG.)	INST. LINE- UNIT 3, TORUS LEVEL	-	-	-	N	E4

NOTES:

1) POWER SUPPLY

THE SOURCE OF POWER FOR THE VALVE POSITION INDICATION LOOP IS IDENTIFIED BY ONE OF THE FOLLOWING:

CLASS 1E - THE POWER IS FROM AN ONSITE POWER SOURCE (DIESEL GENERATORS OR SAFEGUARD BATTERIES) AND THE CABLE TO THE INDICATION LOOP IS SAFEGUARD ROUTED.

ONSITE - THE POWER IS FROM AN ONSITE POWER SOURCE (DIESEL GENERATORS OR SAFEGUARD BATTERIES) AND THE CABLE TO THE INDICATION LOOP IS NON-SAFEGUARD ROUTED.

2) CABLE ROUTING

THE FOLLOWING CABLE ROUTING INFORMATION APPLIES TO THE CABLING USED IN THE POSITION INDICATION LOOP (EXCLUDING POWER SOURCE CABLING). THE ROUTING OF THE POWER SOURCE CABLING IS IDENTIFIED BY THE INFORMATION LISTED UNDER THE COLUMN "POWER SUPPLY."

S- ALL CABLES ROUTED SAFEGUARD

NS- ALL CABLES ROUTED NON-SAFEGUARD

PS- A PORTION OF THE CABLING IS ROUTED SAFEGUARD

3) POSITION INDICATION

THE FOLLOWING NOTES IDENTIFY THE TYPE OF POSITION INDICATION USED ON THE VALVES:

D- DIRECT INDICATION FROM POSITION SWITCHES AT THE VALVE.

I- INDIRECT INDICATION, USUALLY THE INDICATION LIGHT IS ELECTRICALLY PARALLEL TO THE VALVE SOLENOID.

N- NO INDICATION OF VALVE POSITION.

4) MODIFICATIONS AND/OR EXCEPTIONS PROPOSED (ALSO SEE "GENERAL EXCEPTIONS" BELOW)

MODIFICATIONS:

M1- SUFFICIENT DOCUMENTATION DOES NOT EXIST AT THIS TIME TO PROVE THE ENVIRONMENTAL QUALIFICATION OF THE LIMIT SWITCHES ASSOCIATED WITH THE VALVE. SUCH DOCUMENTATION WILL BE OBTAINED OR THE LIMIT SWITCHES WILL BE REPLACED WITH ENVIRONMENTALLY AND SEISMICALLY QUALIFIED LIMIT SWITCHES.

M2- SUFFICIENT DOCUMENTATION DOES NOT EXIST AT THIS TIME TO PROVE THE ENVIRONMENTAL QUALIFICATION OF THE LIMIT SWITCHES

ASSOCIATED WITH THE VALVE. SUCH DOCUMENTATION WILL BE OBTAINED OR THE LIMIT SWITCHES WILL BE REPLACED WITH ENVIRONMENTALLY AND SEISMICALLY QUALIFIED LIMIT SWITCHES. IN ADDITION, THE NECESSARY MEASURES WILL BE TAKEN TO UPGRADE THE INSTALLATION FROM "COMMERCIAL GRADE" TO "FULL Q.A.".

- M3- THE VALVE LIMIT SWITCHES WILL BE REPLACED WITH ENVIRONMENTALLY AND SEISMICALLY QUALIFIED LIMIT SWITCHES. THE DESIGN, PROCUREMENT, AND INSTALLATION ASSOCIATED WITH THE LIMIT SWITCH REPLACEMENT WILL BE IN ACCORDANCE WITH THE PEACH BOTTOM QUALITY ASSURANCE PLAN. THIS WILL UPGRADE THE VALVE POSITION INDICATION FROM "COMMERCIAL GRADE" TO "FULL Q.A.".
- M4- ADD INDIRECT INDICATION TO THE VALVE. SEE EXCEPTION E3.
- M5- THE POSITION INDICATION FOR SOLENOID VALVES SV-2671 A THRU G, SV-2978 A THRU G AND SV-2980, (IDENTICAL VALVES EXIST ON UNIT 3) IS INDIRECT INDICATION; I.E. THE OPEN AND CLOSED INDICATION LAMPS ARE ENERGIZED BY THE ACTUATION OF THE VALVE CONTROL SWITCH IN CONJUNCTION WITH ELECTRICAL COMPONENTS ASSOCIATED WITH THE PRIMARY CONTAINMENT ISOLATION SYSTEM CONTROL LOGIC. NO LIMIT SWITCH IS MOUNTED ON THE VALVE ITSELF. NO DOCUMENTATION EXISTS TO PROVE THE ENVIRONMENTAL QUALIFICATION OF CERTAIN RELAYS USED IN THE POSITION INDICATION CIRCUIT OF THESE VALVES. SUCH DOCUMENTATION WILL BE OBTAINED OR THE RELAYS WILL BE REPLACED WITH ENVIRONMENTALLY AND SEISMICALLY QUALIFIED RELAYS.

EXCEPTIONS:

- E1- THE DESIGN AND QUALIFICATION CRITERIA ASSOCIATED WITH THE POSITION INDICATION PORTION OF THESE VALVES IS COMMENSURATE WITH THE CRITERIA WHICH WAS APPLIED TO THE ISOLATION OF THE TRAVERSING IN-CORE PROBE (TIP) SYSTEM FOR THE ORIGINAL PLANT INSTALLATION. PEACH BOTTOM UPDATED FSAR SECTION 5.2.3.5 DESCRIBES THIS EXCEPTION FROM THE GENERAL DESIGN AND QUALIFICATION CRITERIA USED FOR CONTAINMENT ISOLATION VALVES.
- E2- THE DESIGN AND QUALIFICATION CRITERIA ASSOCIATED WITH THE POSITION INDICATION PORTION OF THESE VALVES IS COMMENSURATE WITH THE CRITERIA WHICH WAS APPLIED TO THE CONTROL ROD DRIVE (CRD) SYSTEM FOR THE ORIGINAL PLANT INSTALLATION. PEACH BOTTOM UPDATED FSAR SECTION 5.2.3.5 DESCRIBES THIS EXCEPTION FROM THE GENERAL DESIGN AND QUALIFICATION CRITERIA USED FOR CONTAINMENT ISOLATION VALVES.
- E3- INDIRECT INDICATION EXISTS ON CERTAIN SMALL VALVES. SINCE THESE VALVES ARE SOLENOID VALVES LOCATED IN LINES THAT ARE ONE INCH OR SMALLER IN DIAMETER AND MANY OF THE VALVES HAVE A CHECK VALVE AS THE REDUNDANT VALVE FOR ISOLATION PURPOSES, IT IS NOT CONSIDERED NECESSARY OR COST/BENEFICIAL TO PROVIDE DIRECT INDICATION FOR THESE VALVES. THE FOLLOWING IS A LISTING OF THESE VALVES: (THE VALVE NUMBERS CORRESPOND TO UNIT 2; IDENTICAL VALVES EXIST ON UNIT 3).

<u>PENETRATION #</u>	<u>DESCRIPTION</u>	<u>LINE SIZE AT THE VALVE</u>	<u>VALVE #</u>
N-218D,N-203,N-51C,N-51B N-51A,N-219,N-26 RESPECTIVELY	CACS SAMPLE	1/2"	SV-2671 A THRU G
N-218B,N-203,N-51C,N-51B N-51A,N-219,N-26 RESPECTIVELY	CACS SAMPLE	1/2"	SV-2978 A THRU G
N-219,N-26,N-51C,N-203	RADIOACTIVE GAS SAMPLE	1/2"	SV-4966 A,B,C,D
N-35F	TIP PURGE	3/8"	SV-2-7-113
N-37 A TO D	CRD INSERT	1/2"	SV-2-3-13-120, SV-2-3-13-123
N-38 A TO D	CRD WITHDRAWAL	1/2"	SV-2-3-13-121, SV-2-3-13-122

N-510 CACS SAMPLE RETURN 1/2" SV-2980

THE FOLLOWING VALVES DO NOT HAVE POSITION INDICATION. (IDENTICAL VALVES EXIST ON UNIT 3). INDIRECT INDICATION IS TO BE INSTALLED ON THESE VALVES. THE JUSTIFICATION FOR INSTALLING INDIRECT INDICATION IS THE SAME AS FOR EXISTING VALVES WITH INDIRECT INDICATION AS DESCRIBED ABOVE.

<u>PENETRATION #</u>	<u>DESCRIPTION</u>	<u>LINE SIZE AT THE VALVE</u>	<u>VALVE #</u>
N-39 A,B	RHR CONTAINMENT SPRAY (CAD)	1"	SV-4949A,B
N-211 A,B	RHR TORUS SPRAY (CAD)	1"	SV-4951A,B
N-219,N-26,N-51C,N-203 RESPECTIVELY	CAD SAMPLE	1/2"	SV-4960 A,B,C,D SV-4961 A,B,C,D

E4- MANUAL VALVES ARE NOT PROVIDED WITH POSITION INDICATION. SINCE THE OPERATION OF THESE VALVES IS CONTROLLED BY PROCEDURES, POSITION INDICATION IS CONSIDERED UNNECESSARY.

E5- ONE OF THESE RELIEF VALVES IS MOUNTED ON THE SUCTION SIDE OF EACH OF THE RESIDUAL HEAT REMOVAL (RHR) PUMPS (PUMPS A,B,C AND D RESPECTIVELY). THE FUNCTION OF THE VALVE IS TO PREVENT THE OVER-PRESSURIZATION OF THE SUCTION LINE UNDER CONDITIONS OF HIGH REACTOR PRESSURE. THE VALVE DISCHARGES TO THE SUPPRESSION POOL. THE DISCHARGE LINE IS ISOLATED BY THE VALVE ITSELF; THAT IS, UNDER CONTAINMENT ISOLATION CONDITIONS, THE VALVE OPERATES IN A FASHION SIMILAR TO A CHECK VALVE. ALSO, THE LINE DISCHARGES BELOW THE SURFACE OF THE WATER THEREBY NOT BEING DIRECTLY OPEN TO CONTAINMENT ATMOSPHERE. THEREFORE, POSITION INDICATION ON THIS VALVE IS CONSIDERED UNNECESSARY.

GENERAL EXCEPTIONS (APPLIES TO ALL ISOLATION VALVES LISTED)

- 1) REDUNDANT INDICATION ON EACH VALVE IS NOT PROVIDED SINCE EACH VALVE IS ONE PART OF A REDUNDANT BARRIER.
- 2) NO DOCUMENTATION EXISTS TO PROVE THE SEISMIC QUALIFICATION OF THE MAIN CONTROL ROOM INDICATION LAMPS ASSOCIATED WITH EACH VALVE. HOWEVER, MOST OF THE LAMPS ARE OF HIGH COMMERCIAL QUALITY (GENERAL ELECTRIC COMPANY MODEL # ET-16) AND WOULD BE EXPECTED TO BE QUALIFIED IF ANALYZED OR TESTED.

SCHEDULE FOR UPGRADE (FOR ALL VALVES FOR WHICH MODIFICATIONS HAVE BEEN IDENTIFIED)

BY THE END OF THE SECOND REFUELING OUTAGE FOR EACH UNIT FOLLOWING THE SPRING 1984 UNIT 2 REFUELING OUTAGE.

VARIABLE NO. C1

DESCRIPTION:	RADIOACTIVITY CONCENTRATION OR RADIATION LEVEL IN CIRCULATING PRIMARY COOLANT	INSTALLED RANGE:	SEE EXCEPTION BELOW
REQUIRED RANGE:	1/2 TECH SPEC LIMIT TO 100 TIMES TECH SPEC LIMIT	ENVIRONMENTAL QUALIFICATION:	
CATEGORY:	1	SEISMIC QUALIFICATION:	
PURPOSE:	DETECTION OF BREACH	QUALITY ASSURANCE:	
		REDUNDANCY:	
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		POWER SUPPLY:	
		LOCATION OF DISPLAY:	

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

THE USEFULNESS OF THE INFORMATION OBTAINED BY MONITORING THE RADIOACTIVITY CONCENTRATION OR RADIATION LEVEL IN THE CIRCULATING PRIMARY COOLANT, IN TERMS OF HELPING THE OPERATOR IN HIS EFFORTS TO PREVENT AND MITIGATE ACCIDENTS, HAS NOT BEEN SUBSTANTIATED. THE CRITICAL ACTIONS THAT MUST BE TAKEN TO PREVENT AND MITIGATE A GROSS BREACH OF FUEL CLADDING ARE (1) SHUT DOWN THE REACTOR AND (2) MAINTAIN WATER LEVEL. MONITORING VARIABLE C1, AS DIRECTED IN REGULATORY GUIDE 1.97, WILL HAVE NO INFLUENCE ON EITHER OF THESE ACTIONS. THE PURPOSE OF THIS MONITOR FALLS IN THE CATEGORY OF "INFORMATION THAT THE BARRIERS TO RELEASE OF RADIOACTIVE MATERIAL ARE BEING CHALLENGED" AND "IDENTIFICATION OF DEGRADED CONDITIONS AND THEIR MAGNITUDE, SO THE OPERATOR CAN TAKE ACTIONS THAT ARE AVAILABLE TO MITIGATE THE CONSEQUENCES." ADDITIONAL OPERATOR ACTIONS TO MITIGATE THE CONSEQUENCES OF FUEL BARRIERS BEING CHALLENGED, OTHER THAN THOSE BASED ON TYPE A AND B VARIABLES, HAVE NOT BEEN IDENTIFIED.

REGULATORY GUIDE 1.97 SPECIFIES MEASUREMENT OF THE RADIOACTIVITY OF THE CIRCULATING PRIMARY COOLANT AS THE KEY VARIABLE IN MONITORING FUEL CLADDING STATUS DURING ISOLATION OF THE NUCLEAR STEAM SUPPLY SYSTEM (NSSS). THE WORDS "CIRCULATING PRIMARY COOLANT" ARE INTERPRETED TO MEAN COOLANT, OR A REPRESENTATIVE SAMPLE OF SUCH COOLANT, THAT FLOWS PAST THE CORE. A BASIC CRITERION FOR A VALID MEASUREMENT OF THE SPECIFIED VARIABLE IS THAT THE COOLANT BEING MONITORED IS COOLANT THAT IS IN ACTIVE CONTACT WITH THE FUEL, THAT IS, FLOWING PAST THE FAILED FUEL. MONITORING THE ACTIVE COOLANT (OR A SAMPLE THEREOF) IS THE DOMINANT CONSIDERATION. THE POST-ACCIDENT SAMPLING SYSTEM (PASS) (SEE VARIABLES C2 AND E12) PROVIDES A REPRESENTATIVE SAMPLE WHICH CAN BE MONITORED.

THE SUBJECT OF CONCERN IN THE REGULATORY GUIDE 1.97 REQUIREMENT IS ASSUMED TO BE AN ISOLATED NSSS THAT IS SHUTDOWN. THIS ASSUMPTION IS JUSTIFIED AS CURRENT MONITORS IN THE CONDENSER OFF-GAS AND MAIN STEAM LINES PROVIDE RELIABLE AND ACCURATE INFORMATION ON THE STATUS OF FUEL CLADDING WHEN THE PLANT IS NOT ISOLATED. FURTHER, THE POST-ACCIDENT SAMPLING SYSTEM (PASS) WILL PROVIDE AN ACCURATE STATUS OF COOLANT RADIOACTIVITY, AND HENCE CLADDING STATUS, ONCE THE PASS IS ACTIVATED. IN THE INTERIM BETWEEN NSSS ISOLATION AND OPERATION OF THE PASS, MONITORING OF THE PRIMARY CONTAINMENT RADIATION (SEE VARIABLES C5 AND E1) AND CONTAINMENT HYDROGEN (SEE VARIABLE C11) WILL PROVIDE INFORMATION ON THE STATUS OF THE FUEL CLADDING.

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IN CONCLUSION, SINCE NO PLANNED OPERATOR ACTIONS ARE IDENTIFIED AND NO OPERATOR ACTIONS ARE ANTICIPATED BASED ON THIS VARIABLE SERVING AS THE KEY VARIABLE, THE INSTRUMENTATION MENTIONED IN THE ABOVE PARAGRAPHS IS ADEQUATE FOR MONITORING FUEL CLADDING STATUS.

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. C2

DESCRIPTION:	ANALYSIS OF PRIMARY COOLANT (GAMMA SPECTRUM)	INSTALLED RANGE:	1 MICRO CI/CC TO 10 CI/CC. SEE NOTE 1.
REQUIRED RANGE:	10 MICRO CI/ML TO 10 CI/ML OR TID-14844 SOURCE TERM IN COOLANT VOLUME	ENVIRONMENTAL QUALIFICATION:	NA
CATEGORY:	3	SEISMIC QUALIFICATION:	NA
PURPOSE:	DETAIL ANALYSIS;ACCOMPLISHMENT OF MITIGATION; VERIFICATION;LONG-TERM SURVEILLANCE	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	1 SAMPLE STATION FOR EACH UNIT
		<u>SENSOR(S):</u> POST ACCIDENT SAMPLING STATION	<u>LOCATION:</u> RADWASTE BUILDING
		POWER SUPPLY:	ONSITE AND OFFSITE SOURCES
		LOCATION OF DISPLAY:	ONSITE OR OFFSITE LAB ANALYSIS

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

NOTES:

1) ADDITIONAL INFORMATION CONCERNING PEACH BOTTOM'S POST ACCIDENT SAMPLING AND ANALYSIS PROVISIONS HAS PREVIOUSLY BEEN PROVIDED TO THE NRC IN A LETTER FROM S.L. DALTROFF (PECO) TO J.F. STOLZ (NRC) DATED 1/31/83, SUBJECT: POST ACCIDENT SAMPLING.

NRC ACCEPTANCE OF PEACH BOTTOM'S POST ACCIDENT SAMPLING PROVISIONS HAS BEEN DOCUMENTED IN A LETTER FROM J.F. STOLZ (NRC) TO

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E.G. BAUER (PECO) DATED 10/6/83, SUBJECT: POST ACCIDENT SAMPLING.

VARIABLE NO. C3
(ALSO SEE VARIABLE B5)

DESCRIPTION:	BWR CORE TEMPERATURE	INSTALLED RANGE:	SEE EXCEPTION: BELOW
REQUIRED RANGE:	200-2300 DEGREES F	ENVIRONMENTAL QUALIFICATION:	
CATEGORY:	UNCLASSIFIED	SEISMIC QUALIFICATION:	
PURPOSE:	TO PROVIDE DIVERSE INDICATION OF WATER LEVEL	QUALITY ASSURANCE:	
		REDUNDANCY:	
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		POWER SUPPLY:	
		LOCATION OF DISPLAY:	

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

IMPLEMENTATION OF THE REQUIREMENTS FOR THIS VARIABLE IS NOT NECESSARY BASED ON THE REPORTS BY THE BWR OWNERS' GROUP. THESE REPORTS, SLI-8211 AND SLI-8218 PROVIDE THE JUSTIFICATION.

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. C4
(ALSO SEE VARIABLES A1, B6, AND C9)

DESCRIPTION:	RCS PRESSURE	INSTALLED RANGE:	PT-2(3)-6-105; 0-1500 PSIG PT-2(3)-6-53A,B,C; 0-1200 PSIG
REQUIRED RANGE:	0 TO 1500 PSIG	ENVIRONMENTAL QUALIFICATION:	NO
CATEGORY:	1	SEISMIC QUALIFICATION:	NO
PURPOSE:	DETECTION OF POTENTIAL FOR OR ACTUAL BREACH; ACCOMPLISHMENT OF MITIGATION; LONG TERM SURVEILLANCE	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	MULTI-CHANNEL
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		PT-2(3)-6-105	REACTOR BUILDING
		PT-2(3)-6-53A,B,C	REACTOR BUILDING
		POWER SUPPLY:	UNINTERRUPTIBLE POWER (ONSITE SOURCE BACKED BY STATION BATTERIES)
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

A MODIFICATION HAS BEEN INITIATED TO INSTALL INSTRUMENTATION WHICH IS ENVIRONMENTALLY AND SEISMICALLY QUALIFIED AND IS POWERED BY CLASS 1E POWER SOURCES. ALL OTHER REQUIREMENTS FOR CATEGORY 1 INSTRUMENTATION WILL BE INCORPORATED INTO THE MODIFICATION (MODIFICATION 893B).

SCHEDULE FOR UPGRADE:

UNIT 2 INSTALLATION - NEXT REFUELING OUTAGE.

UNIT 3 INSTALLATION - NEXT REFUELING OUTAGE.

VARIABLE NO. C5
(ALSO SEE VARIABLE E1)

DESCRIPTION: PRIMARY CONTAINMENT AREA RADIATION
REQUIRED RANGE: 1 R/HR TO 1 X E+05 R/HR
CATEGORY: 3
PURPOSE: DETECTION OF BREACH; VERIFICATION

INSTALLED RANGE: 1 R/HR TO 1 X E+08 R/HR
ENVIRONMENTAL QUALIFICATION: YES
SEISMIC QUALIFICATION: YES
QUALITY ASSURANCE: FULL Q.A. PLAN
REDUNDANCY: 4 CHANNELS (2 DIVISIONS)
SENSOR(S): LOCATION:
RE-8103(9103)A,B,C,D DRYWELL
POWER SUPPLY: CLASS 1E
LOCATION OF DISPLAY: MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. C6
(ALSO SEE VARIABLE B5)

DESCRIPTION:	DRYWELL DRAIN SUMPS LEVEL (IDENTIFIED AND UNIDENTIFIED LEAKAGE). AT PEACH BOTTOM THIS IS DRYWELL EQUIPMENT DRAIN SUMP AND FLOOR DRAIN SUMP.	INSTALLED RANGE:	ANNUNCIATOR ALARM FOR HIGH-HIGH LEVEL FOR BOTH THE EQUIPMENT DRAIN SUMP AND FLOOR DRAIN SUMP.
REQUIRED RANGE:	TOP TO BOTTOM	ENVIRONMENTAL QUALIFICATION:	NO, SEE EXCEPTION BELOW
CATEGORY:	1	SEISMIC QUALIFICATION:	NO, SEE EXCEPTION BELOW
PURPOSE:	DETECTION OF BREACH; ACCOMPLISHMENT OF MITIGATION; VERIFICATION; LONG TERM SURVEILLANCE.	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REUNDANCY:	1 CHANNEL FOR EACH SUMP
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		LE-2(3)-20-351	DRYWELL
		LE-2(3)-20-360	DRYWELL
		POWER SUPPLY:	ONSITE
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

PEACH BOTTOM HAS TWO DRYWELL DRAIN SUMPS. ONE DRAIN IS THE EQUIPMENT DRAIN SUMP, WHICH COLLECTS IDENTIFIED LEAKAGE; THE OTHER IS THE FLOOR DRAIN SUMP, WHICH COLLECTS UNIDENTIFIED LEAKAGE. ALTHOUGH THE LEVEL OF THE DRAIN SUMPS CAN BE A DIRECT INDICATION OF BREACH OF THE REACTOR COOLANT SYSTEM PRESSURE BOUNDARY, THE INDICATION IS AMBIGUOUS BECAUSE THERE IS WATER IN THOSE SUMPS DURING NORMAL OPERATION. THERE IS OTHER INSTRUMENTATION REQUIRED BY REGULATORY GUIDE 1.97 THAT WOULD INDICATE LEAKAGE IN THE DRYWELL:

1. DRYWELL PRESSURE--VARIABLE B7, CATEGORY 1
2. DRYWELL TEMPERATURE--VARIABLE D7, CATEGORY 2
3. PRIMARY CONTAINMENT AREA RADIATION--VARIABLE C5, CATEGORY 3

THE DRYWELL-SUMP LEVEL SIGNAL NEITHER AUTOMATICALLY INITIATES SAFETY-RELATED SYSTEMS NOR ALERTS THE OPERATOR TO THE NEED TO TAKE SAFETY-RELATED ACTIONS. BOTH SUMPS HAVE A LEVEL SWITCH THAT PROVIDES A HIGH-HIGH LEVEL ALARM IN THE MAIN CONTROL ROOM AND A RECORDER THAT INDICATES TOTAL FLOW FROM THE SUMP. THE AMOUNT OF LEAKAGE CAN BE DETERMINED BY THE TIME VERSUS FLOW PLOT FROM THE RECORDER.

REGULATORY GUIDE 1.97 REQUIRES INSTRUMENTATION TO FUNCTION DURING AND AFTER AN ACCIDENT. THE DRYWELL SUMP SYSTEMS ARE DELIBERATELY ISOLATED AT THE PRIMARY CONTAINMENT PENETRATION UPON RECEIPT OF AN ACCIDENT SIGNAL TO ESTABLISH CONTAINMENT INTEGRITY. THIS FACT RENDERS THE DRYWELL-SUMP-LEVEL SIGNAL IRRELEVANT. THEREFORE, BY DESIGN, DRYWELL-SUMP-LEVEL INSTRUMENTATION SERVES NO USEFUL ACCIDENT-MONITORING FUNCTION.

THE EMERGENCY OPERATING PROCEDURES USE REACTOR LEVEL AND DRYWELL PRESSURE AS ENTRY CONDITIONS FOR THE LEVEL CONTROL GUIDELINE. A SMALL LINE BREAK WILL CAUSE THE DRYWELL PRESSURE TO INCREASE BEFORE A NOTICEABLE INCREASE IN THE SUMP LEVEL. THEREFORE, THE DRYWELL SUMPS WILL PROVIDE A "LAGGING" VERSUS "EARLY" INDICATION OF A LEAK.

BASED ON THE ABOVE DISCUSSION, THE EXISTING CATEGORY 3 SUMP LEVEL INSTRUMENTATION IS ADEQUATE.

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. C7
(ALSO SEE VARIABLES A4 AND D5)

DESCRIPTION:	SUPPRESSION POOL WATER LEVEL	INSTALLED RANGE:	1-21 FT.
REQUIRED RANGE:	BOTTOM OF THE ECCS SUCTION LINE TO 5 FT. ABOVE NORMAL WATER LEVEL	ENVIRONMENTAL QUALIFICATION:	YES
CATEGORY:	1	SEISMIC QUALIFICATION:	YES
PURPOSE:	DETECTION OF BREACH;ACCOMPLISHMENT OF MITIGATION;VERIFICATION;LONG TERM SURVEILLANCE	QUALITY ASSURANCE:	FULL Q.A. PLAN
		REDUNDANCY:	2 DIVISIONS
		<u>SENSOR(S):</u> LT-8123(9123)A,B	<u>LOCATION:</u> REACTOR BUILDING
		POWER SUPPLY:	CLASS 1E
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM (RECORDERS AND INDICATORS) AND EMERGENCY SHUTDOWN PANEL (INDICATOR)

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. C8
(ALSO SEE VARIABLES A5, B7, B9, C10, AND D4)

DESCRIPTION:	DRYWELL PRESSURE	INSTALLED RANGE:	5 TO 25 PSIA 0 TO 225 PSIG
REQUIRED RANGE:	0 TO DESIGN PRESSURE (PEACH BOTTOM DESIGN PRESSURE IS 56 PSIG)	ENVIRONMENTAL QUALIFICATION:	YES
CATEGORY:	1	SEISMIC QUALIFICATION:	YES
PURPOSE:	DETECTION OF BREACH; VERIFICATION.	QUALITY ASSURANCE:	FULL Q.A. PLAN
		REDUNDANCY:	2 DIVISIONS
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		PT-8102(9102)A,B,C,D	REACTOR BUILDING
		POWER SUPPLY:	CLASS 1E
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. C9
(ALSO SEE VARIABLES A1, B6, AND C4)

DESCRIPTION:	RCS PRESSURE	INSTALLED RANGE:	PT-2(3)-6-105; 0-1500 PSIG PT-2(3)-6-53A,B,C; 0-1200 PSIG
REQUIRED RANGE:	0 TO 1500 PSIG	ENVIRONMENTAL QUALIFICATION:	NO
CATEGORY:	1	SEISMIC QUALIFICATION:	NO
PURPOSE:	DETECTION OF POTENTIAL FOR BREACH; ACCOMPLISHMENT OF MITIGATION.	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	MULTI-CHANNEL
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		PT-2(3)-6-105	REACTOR BUILDING
		PT-2(3)-6-53A,B,C	REACTOR BUILDING
		POWER SUPPLY:	UNINTERRUPTIBLE POWER (ONSITE SOURCE BACKED BY STATION BATTERIES)
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

A MODIFICATION HAS BEEN INITIATED TO INSTALL INSTRUMENTATION WHICH IS ENVIRONMENTALLY AND SEISMICALLY QUALIFIED AND IS POWERED BY CLASS 1E POWER SOURCES. ALL OTHER REQUIREMENTS FOR CATEGORY 1 INSTRUMENTATION WILL BE INCORPORATED INTO THE MODIFICATION. (MODIFICATION 893B).

SCHEDULE FOR UPGRADE:

UNIT 2 INSTALLATION - NEXT REFUELING OUTAGE.

UNIT 3 INSTALLATION - NEXT REFUELING OUTAGE.

VARIABLE NO. C10
(ALSO SEE VARIABLES A5, B7, B9, C8, AND D4)

DESCRIPTION:	PRIMARY CONTAINMENT PRESSURE	INSTALLED RANGE:	5 TO 25 PSIA 0 TO 225 PSIG
REQUIRED RANGE:	-5 PSIG PRESSURE TO 3 TIMES DESIGN PRESSURE FOR CONCRETE; 4 TIMES DESIGN PRESSURE FOR STEEL. (FOR PEACH BOTTOM, THE RANGE OF .5 PSIG TO 4 TIMES DESIGN PRESSURE IS APPLICABLE.)	ENVIRONMENTAL QUALIFICATION:	YES
CATEGORY:	1	SEISMIC QUALIFICATION:	YES
PURPOSE:	DETECTION OF POTENTIAL FOR OR ACTUAL BREACH; ACCOMPLISHMENT OF MITIGATION.	QUALITY ASSURANCE:	FULL Q.A. PLAN
		REDUNDANCY:	2 DIVISIONS
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		PT-8102(9102)A,B,C,D	REACTOR BUILDING
		POWER SUPPLY:	CLASS 1E
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. C11

DESCRIPTION:	CONTAINMENT AND DRYWELL HYDROGEN CONCENTRATION	INSTALLED RANGE:	0 TO 20 VOLUME % FOR PRESSURE FROM -5 PSIG TO DESIGN PRESSURE; SEE EXCEPTION
REQUIRED RANGE:	0 TO 30 VOL. % (CAPABILITY OF OPERATING FROM -5 PSIG TO DESIGN PRESSURE). (PEACH BOTTOM DESIGN PRESSURE IS 56 PSIG.)	ENVIRONMENTAL QUALIFICATION:	YES, EXCEPT THERE IS NOT SUFFICIENT TEST DATA AVAILABLE TO PROVE THE QUALIFICATION OF CERTAIN ANALYZER SOLENOID VALVES AND THE SAMPLE LINE HEAT TRACE DOWNSTREAM OF THE MOISTURE SEPARATOR (SEE MODIFICATIONS 2 AND 3). NOTE, UNDER EXPECTED POST-LOCA CONDITIONS, THE MOTIVE FORCE FOR GAS SAMPLING WILL BE PROVIDED BY THE DIFFERENTIAL PRESSURE BETWEEN THE PRIMARY CONTAINMENT AND THE ANALYZER EXHAUST, WHICH IS CONNECTED TO THE STANDBY GAS TREATMENT SYSTEM SUCTION. SHOULD INSUFFICIENT DIFFERENTIAL PRESSURE EXIST FOR THIS METHOD OF SAMPLING (I.E., SUBATMOSPHERIC DRYWELL CONDITIONS), THE SAMPLE PUMPS PROVIDED WITH THE ANALYZERS FOR SURVEILLANCE TESTING PURPOSES MAY BE UTILIZED. SINCE THIS IS NOT EXPECTED POST-LOCA, THE SAMPLE PUMPS ARE CONSIDERED TO BE IN A "MILD ENVIRONMENT" FOR QUALIFICATION PURPOSES.
CATEGORY:	1	SEISMIC QUALIFICATION:	YES, EXCEPT FOR THE RECORDERS (SEE MODIFICATION 1)
PURPOSE:	DETECTION OF POTENTIAL FOR BREACH; ACCOMPLISHMENT OF MITIGATION	QUALITY ASSURANCE:	FULL Q.A. PLAN
		REDUNDANCY:	2 DIVISIONS FOR DRYWELL ATMOSPHERE 2 DIVISIONS FOR SUPPRESSION POOL ATMOSPHERE
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		H2E-4965(5965)A,B,C,D MOUNTED WITHIN THE CONTAINMENT ATMOSPHERE DILUTION ANALYZERS	REACTOR BUILDING
		POWER SUPPLY:	CLASS 1E
		LOCATION OF DISPLAY:	CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

SINCE THE PEACH BOTTOM CONTAINMENT IS INERTED AND POST ACCIDENT COMBUSTIBLE GAS CONTROL IS MAINTAINED BY OXYGEN DEFICIENCY, THE CONTROL OF COMBUSTIBLE GAS CONCENTRATIONS IN CONTAINMENT IS RELATIVELY INSENSITIVE TO THE RATE OR EXTENT OF HYDROGEN GENERATION DUE

TO METAL-WATER REACTION. MAINTENANCE OF CONTAINMENT GAS CONCENTRATIONS BELOW COMBUSTIBLE LIMITS IS ACCOMPLISHED BY THE ADDITION OF NITROGEN TO LIMIT OXYGEN CONCENTRATIONS TO LESS THAN 5%. INDICATION OF HYDROGEN CONCENTRATION IS USED ONLY TO DETERMINE IF A LEVEL OF HYDROGEN EXISTS WITHIN CONTAINMENT SUCH THAT CONTROL OF OXYGEN CONCENTRATION IS NEEDED. THEREFORE, IT IS CONCLUDED THAT THIS REDUCED RANGE WILL NOT AFFECT THE ABILITY OF THE HYDROGEN MONITORING INSTRUMENTATION TO PERFORM ITS INTENDED FUNCTION. SUPPORT OF THIS CONCLUSION IS PROVIDED BY THE REQUIREMENTS OF NUREG-0737, ITEM II.F.1.6; A RANGE OF ONLY 0-10% IS SPECIFIED IN THIS NUREG REQUIREMENT.

MODIFICATIONS PROPOSED:

- 1) REPLACE THE CONTROL ROOM RECORDERS WITH SEISMICALLY QUALIFIED RECORDERS (MOD 584C).
- 2) OBTAIN THE NECESSARY QUALIFICATION DOCUMENTATION TO PROVE THE ENVIRONMENTAL QUALIFICATION OF CERTAIN ANALYZER SOLENOID VALVES (MOD 1016), OR REPLACE THE VALVES WITH ENVIRONMENTALLY QUALIFIED VALVES.
- 3) REPLACE THE HEAT TRACE ON THE SAMPLE LINES DOWNSTREAM OF THE MOISTURE SEPARATOR WITH ENVIRONMENTALLY QUALIFIED EQUIPMENT (MOD 1234).

SCHEDULE FOR UPGRADE:

- 1) MOD 584C - UNIT 2: NEXT REFUELING OUTAGE
UNIT 3: NEXT REFUELING OUTAGE
- 2) BY THE END OF THE SECOND REFUELING OUTAGE FOR EACH UNIT FOLLOWING THE SPRING 1984 UNIT 2 REFUELING OUTAGE.
- 3) MOD 1234 - BY THE END OF THE SECOND REFUELING OUTAGE FOR EACH UNIT FOLLOWING THE SPRING 1984 UNIT 2 REFUELING OUTAGE.

VARIABLE NO. C12
(ALSO SEE VARIABLE A6)

DESCRIPTION:	CONTAINMENT AND DRYWELL OXYGEN CONCENTRATION (FOR INERTED CONTAINMENT PLANTS)	INSTALLED RANGE:	0-10 VOLUME % FOR PRESSURE FROM -5 PSIG TO DESIGN PRESSURE
REQUIRED RANGE:	0-10 VOLUME % (CAPABILITY OF OPERATING FROM -5 PSIG TO DESIGN PRESSURE) (PEACH BOTTOM DESIGN PRESSURE IS 56 PSIG)	ENVIRONMENTAL QUALIFICATION:	YES, EXCEPT THAT THERE IS NOT SUFFICIENT TEST DATA AVAILABLE TO PROVE THE QUALIFICATION OF CERTAIN ANALYZER SOLENOID VALVES AND THE SAMPLE LINE HEAT TRACE DOWNSTREAM OF THE MOISTURE SEPARATOR (SEE MODIFICATIONS 2 AND 3).
CATEGORY:	1	NOTE:	UNDER EXPECTED POST-LOCA CONDITIONS, THE MOTIVE FORCE FOR GAS SAMPLING WILL BE PROVIDED BY THE DIFFERENTIAL PRESSURE BETWEEN THE PRIMARY CONTAINMENT AND THE ANALYZER EXHAUST, WHICH IS CONNECTED TO THE STANDBY GAS TREATMENT SYSTEM SUCTION. SHOULD INSUFFICIENT DIFFERENTIAL PRESSURE EXIST FOR THIS METHOD OF SAMPLING (I.E. SUBATMOSPHERIC DRYWELL CONDITIONS), THE SAMPLE PUMPS PROVIDED WITH THE ANALYZERS FOR SURVEILLANCE TESTING PURPOSES MAY BE UTILIZED. SINCE THIS IS NOT EXPECTED POST-LOCA, THE SAMPLE PUMPS ARE CONSIDERED TO BE IN A "MILD ENVIRONMENT" FOR QUALIFICATION PURPOSES.
PURPOSE:	DETECTION OF POTENTIAL FOR BREACH; ACCOMPLISHMENT OF MITIGATION.	SEISMIC QUALIFICATION:	YES, EXCEPT FOR THE RECORDERS (SEE MODIFICATION 1)
		QUALITY ASSURANCE:	FULL Q.A. PLAN
		REDUNDANCY:	2 DIVISIONS FOR DRYWELL ATMOSPHERE 2 DIVISIONS FOR SUPPRESSION POOL ATMOSPHERE
		<u>SENSOR(S):</u> 02E-4963(5963)A,B,C,D MOUNTED WITHIN THE CONTAINMENT ATMOSPHERE DILUTION ANALYZERS	<u>LOCATION:</u> REACTOR BUILDING
		POWER SUPPLY:	CLASS 1E
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

- 1) REPLACE THE CONTROL ROOM RECORDERS WITH SEISMICALLY QUALIFIED RECORDERS (MOD 584C).
- 2) OBTAIN THE NECESSARY QUALIFICATION DOCUMENTATION TO PROVE THE ENVIRONMENTAL QUALIFICATION OF CERTAIN ANALYZER SOLENOID VALVES (MOD 1016), OR REPLACE THE VALVES WITH ENVIRONMENTALLY QUALIFIED VALVES.
- 3) REPLACE THE HEAT TRACE ON THE SAMPLE LINES DOWNSTREAM OF THE MOISTURE SEPARATOR WITH ENVIRONMENTALLY QUALIFIED EQUIPMENT (MOD 1234).

SCHEDULE FOR UPGRADE:

- 1) MOD 584C - UNIT 2: NEXT REFUELING OUTAGE
UNIT 3: NEXT REFUELING OUTAGE
- 2) BY THE END OF THE SECOND REFUELING OUTAGE FOR EACH UNIT FOLLOWING THE SPRING 1984 UNIT 2 REFUELING OUTAGE.
- 3) MOD 1234 - BY THE END OF THE SECOND REFUELING OUTAGE FOR EACH UNIT FOLLOWING THE SPRING 1984 UNIT 2 REFUELING OUTAGE.

VARIABLE NO. C13
(ALSO SEE VARIABLE E4, PART 6)

DESCRIPTION:	CONTAINMENT EFFLUENT RADIOACTIVITY - NOBLE GASES (FROM IDENTIFIED RELEASE POINTS INCLUDING THE STANDBY GAS TREATMENT SYSTEM VENT). AT PEACH BOTTOM THIS IS THE OFF GAS STACK RADIOACTIVITY SINCE THE PRIMARY CONTAINMENT EFFLUENT EXHAUSTS THROUGH THE OFF GAS STACK.	INSTALLED RANGE:	AT 20,000 CFM: LOW RANGE: 1 X E-05 TO 5.0 MICRO CI/CC HIGH RANGE: 1.4 X E-02 TO 1.4 X E+04 MICRO CI/CC
REQUIRED RANGE:	1 X E-06 MICRO CI/CC TO 1 X E-02 MICRO CI/CC	ENVIRONMENTAL QUALIFICATION:	NA
CATEGORY:	3	SEISMIC QUALIFICATION:	NA
PURPOSE:	DETECTION OF ACTUAL BREACH; ACCOMPLISHMENT OF MITIGATION; VERIFICATION.	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	2 CHANNELS FOR THE LOW RANGE 1 CHANNEL FOR THE HIGH RANGE
		<u>SENSOR(S):</u> RE-0-17-30A,B RE-7127C	<u>LOCATION:</u> OFF-GAS STACK EQUI - 1 BUILDING OFF-GAS STACK EQUI - 2 BUILDING
		POWER SUPPLY:	A COMBINATION OF UNINTERRUPTIBLE POWER (ONSITE SOURCE BACKED BY STATION BATTERIES), ONSITE SOURCES AND STATION BATTERIES FOR THE LOW RANGE; A COMBINATION OF UNINTERRUPTIBLE POWER (ONSITE SOURCE BACKED BY STATION BATTERIES) AND ONSITE SOURCES FOR THE HIGH RANGE SENSORS. OFFSITE SOURCE FOR THE HIGH RANGE RECORDER.
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

THE LOW RANGE REQUIREMENT IS UNNECESSARILY LOW; THE NORMAL STATION BACKGROUND RADIATION (APPROXIMATELY 1 X E-05 MICRO CI/CC) IS GREATER THAN THE LOW RANGE SPECIFIED IN REGULATORY GUIDE 1.97.

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. C14
(ALSO SEE VARIABLE E4, PART 5)

DESCRIPTION:	EFFLUENT RADIOACTIVITY - NOBLE GASES FROM BUILDINGS OR AREAS WHERE PENETRATIONS AND HATCHES ARE LOCATED, E.G. SECONDARY CONTAINMENT AND AUXILIARY BUILDINGS AND FUEL HANDLING BUILDINGS THAT ARE IN DIRECT CONTACT WITH PRIMARY CONTAINMENT. FOR PEACH BOTTOM THIS IS THE UNIT VENT STACK RADIOACTIVITY SINCE THE EFFLUENT FROM THESE AREAS EXHAUSTS THROUGH THE VENT STACKS FOR EACH UNIT.	INSTALLED RANGE:	LOW RANGE: $1 \times E-07$ MICRO CI/CC TO $1.6 \times E-02$ MICRO CI/CC HIGH RANGE: $1.4 \times E-02$ TO $1.4 \times E+04$ MICRO CI/CC
		ENVIRONMENTAL QUALIFICATION:	NO
		SEISMIC QUALIFICATION:	NA
		QUALITY ASSURANCE:	COMMERCIAL GRADE
REQUIRED RANGE:	$1 \times E-06$ MICRO CI/CC TO $1 \times E+03$ MICRO CI/CC	REDUNDANCY:	2 CHANNELS FOR THE LOW RANGE 1 CHANNEL FOR THE HIGH RANGE
CATEGORY:	2	SENSOR(S):	LOCATION:
PURPOSE:	INDICATION OF BREACH	RE-2979(3979)A,B RE-7127A (UNIT 2) RE-7127B (UNIT 3)	REACTOR BUILDING REACTOR BUILDING REACTOR BUILDING
		POWER SUPPLY:	ONSITE FOR LOW RANGE ONSITE FOR HIGH RANGE SENSORS OFFSITE FOR THE HIGH RANGE RECORDERS
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

THE ONLY BUILDING IN CONTACT WITH THE PRIMARY CONTAINMENT AT PEACH BOTTOM IS THE REACTOR BUILDING. BY DESIGN, THE UNIT VENT STACKS ARE NOT THE RELEASE POINT FOR THE REACTOR BUILDING ATMOSPHERE DURING ACCIDENT CONDITIONS. THE PLANT IS DESIGNED TO ISOLATE THE REACTOR BUILDING ON A HIGH RADIATION SIGNAL AND PROCESS THE REACTOR BUILDING ATMOSPHERE THROUGH THE STANDBY GAS TREATMENT SYSTEM. THE RELEASE POINT FOR THE STANDBY GAS TREATMENT SYSTEM IS THROUGH THE OFF GAS STACK. THE OFF GAS STACK MONITORING EQUIPMENT MEETS THE R.G.1.97 REQUIREMENTS FOR CATEGORY 2 INSTRUMENTS. (SEE VARIABLE E4, PART 6 AND PART 8). SINCE THE UNIT VENT STACKS ARE NOT USED TO MONITOR RELEASES FROM THE REACTOR BUILDING DURING ACCIDENT CONDITIONS, THE EXISTING CATEGORY 3 INSTRUMENTATION IS ADEQUATE.

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. P1

DESCRIPTION:	MAIN FEEDWATER FLOW	INSTALLED RANGE:	0 TO 7 X E+06 LBS/HR
REQUIRED RANGE:	0-110% DESIGN FLOW (PEACH BOTTOM DESIGN FLOW IS 4.888 X E+06 LBS/HR)	ENVIRONMENTAL QUALIFICATION:	NA
CATEGORY:	3	SEISMIC QUALIFICATION:	NA
PURPOSE:	DETECTION OF OPERATION; ANALYSIS OF COOLING	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	1 CHANNEL PER FEED PUMP
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		FT-2(3)-6-50A,B,C	TURBINE BUILDING
		POWER SUPPLY:	UNINTERRUPTIBLE POWER (ONSITE SOURCE BACKED BY STATION BATTERIES)
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. D2

DESCRIPTION:	CONDENSATE STORAGE TANK LEVEL	INSTALLED RANGE:	0-42 FT. NOTE: THIS IS INDICATIVE OF USABLE LEVEL.
REQUIRED RANGE:	TOP TO BOTTOM	ENVIRONMENTAL QUALIFICATION:	NA
CATEGORY:	3	SEISMIC QUALIFICATION:	NA
PURPOSE:	INDICATION OF AVAILABLE WATER FOR COOLING	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	1 CHANNEL
		<u>SENSOR(S):</u> LT-2217(3217)	<u>LOCATION:</u> TURBINE BUILDING
		POWER SUPPLY:	ONSITE POWER
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM AND REMOTE SHUTDOWN PANEL

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. 03

DESCRIPTION:	SUPPRESSION CHAMBER SPRAY FLOW	INSTALLED RANGE:	0 TO 25,000 GPM.
		NOTE:	A COMMON FLOW ELEMENT IS USED TO MEASURE DRYWELL SPRAY FLOW, SUPPRESSION POOL SPRAY FLOW, AND SUPPRESSION POOL COOLING FLOW.
REQUIRED RANGE:	0-110% DESIGN FLOW (PEACH BOTTOM DESIGN FLOW IS 850 GPM)	ENVIRONMENTAL QUALIFICATION:	BEING EVALUATED; SEE MODIFICATIONS PROPOSED
CATEGORY:	2	SEISMIC QUALIFICATION:	NA
PURPOSE:	TO MONITOR OPERATION	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	1 CHANNEL FOR THE "A" LOOP AND 1 CHANNEL FOR THE "B" LOOP
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		FT-2(3)-10-111A,B	REACTOR BUILDING
		POWER SUPPLY:	ONSITE POWER
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

THE SUPPRESSION POOL SPRAYS ARE USED TO CONTROL THE PRESSURE AND TEMPERATURE IN THE SUPPRESSION POOL. THE FLOW TO THE SPRAYS IS MONITORED BY A FLOW ELEMENT WHICH IS COMMON TO BOTH THE DRYWELL AND SUPPRESSION POOL SPRAY LINES AND THE SUPPRESSION POOL COOLING WATER LINE. THE OPERATOR CAN VERIFY THAT THE INDICATED FLOW IS THE FLOW THAT IS BEING DIVERTED TO THE SUPPRESSION POOL SPRAYS BY OBSERVING THE POSITION (IN THE MAIN CONTROL ROOM) OF THE VALVES IN THE SUPPRESSION POOL SPRAY, DRYWELL SPRAY, AND SUPPRESSION POOL COOLING WATER LINE. THE EFFECTIVENESS OF THE FLOW CAN BE VERIFIED BY OBSERVING PRESSURE AND TEMPERATURE CHANGES IN THE SUPPRESSION CHAMBER. BY OBSERVING SPRAY FLOW, AND PRESSURE AND TEMPERATURE CHANGES IN THE SUPPRESSION CHAMBER, THE OPERATOR IS PRESENTED THE INFORMATION NEEDED FOR DETERMINING THE EXISTENCE OF SPRAY FLOWS WITHOUT THE USE OF A DEDICATED FLOW MEASURING INSTRUMENT.

MODIFICATIONS PROPOSED:

SUFFICIENT DOCUMENTATION DOES NOT EXIST AT THIS TIME TO PROVE THE ENVIRONMENTAL QUALIFICATION OF THE FLOW TRANSMITTERS. SUCH DOCUMENTATION WILL BE OBTAINED OR THE TRANSMITTERS WILL BE REPLACED WITH ENVIRONMENTALLY QUALIFIED FLOW TRANSMITTERS.

SCHEDULE FOR UPGRADE:

BY THE END OF THE SECOND REFUELING OUTAGE FOR EACH UNIT FOLLOWING THE SPRING 1984 UNIT 2 REFUELING OUTAGE.

VARIABLE NO. D4
(ALSO SEE VARIABLES A5, B7, B9, C8, AND C10)

DESCRIPTION:	DRYWELL PRESSURE	INSTALLED RANGE:	NARROW RANGE: 5 TO 25 PSIA WIDE RANGE: 0 TO 225 PSIG
REQUIRED RANGE:	-5 PSIG TO 3 PSIG (NARROW RANGE) AND 0 TO 110% DESIGN PRESSURE (WIDE RANGE) (PEACH BOTTOM DESIGN PRESSURE IS 56 PSIG)	ENVIRONMENTAL QUALIFICATION:	YES
CATEGORY:	2	SEISMIC QUALIFICATION:	YES
PURPOSE:	TO MONITOR OPERATION	QUALITY ASSURANCE:	FULL Q.A. PLAN
		REDUNDANCY:	2 DIVISIONS FOR EACH RANGE
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		PT-8102(9102)A,B,C,D	REACTOR BUILDING
		POWER SUPPLY:	CLASS 1E
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NC. D5
(ALSO SEE VARIABLES A4 AND C7)

DESCRIPTION:	SUPPRESSION POOL WATER LEVEL	INSTALLED RANGE:	1 TO 21 FT.
REQUIRED RANGE:	TOP OF VENT TO TOP OF WIER WELL (1)	ENVIRONMENTAL QUALIFICATION:	YES
CATEGORY:	2	SEISMIC QUALIFICATION:	YES
PURPOSE:	TO MONITOR OPERATION	QUALITY ASSURANCE:	FULL Q.A. PLAN
		REDUNDANCY:	2 DIVISIONS
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		LT-8123 (9123)A,B	REACTOR BUILDING
		POWER SUPPLY:	CLASS 1E
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM (RECORDERS AND INDICATORS) AND EMERGENCY SHUTDOWN PANEL (INDICATOR)

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

NOTES:

- 1) THE RANGE GIVEN IN REGULATORY GUIDE 1.97 APPLIES TO A MARK III CONTAINMENT. IT IS ASSUMED THAT THE REQUIRED RANGE FOR THE MARK I CONTAINMENT AT PEACH BOTTOM IS FROM THE BOTTOM OF THE ECCS SUCTION LINE TO 5 FEET ABOVE THE NORMAL WATER LEVEL IN THE SUPPRESSION POOL (I.E. THE SAME AS LISTED FOR VARIABLE C7).

VARIABLE NO. D6
(ALSO SEE VARIABLE A3)

DESCRIPTION:	SUPPRESSION POOL WATER TEMPERATURE	INSTALLED RANGE:	30 TO 230 DEGREES FAHRENHEIT
REQUIRED RANGE:	40 TO 230 DEGREES FAHRENHEIT	ENVIRONMENTAL QUALIFICATION:	YES
CATEGORY:	2	SEISMIC QUALIFICATION:	YES
PURPOSE:	TO MONITOR OPERATION	QUALITY ASSURANCE:	FULL Q.A. PLAN
		REDUNDANCY:	2 DIVISIONS
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		TE-2(3)-2-71 A1,B1,C1	LOCATED ON TORUS SHELL
		D1,E1,F1,G1,H1,J1	
		K1,L1,M1,N1	
		TE-2(3)-2-71 A2,B2,C2	LOCATED ON TORUS SHELL
		D2,E2,F2,G2,H2,J2	
		K2,L2,M2,N2	
		POWER SUPPLY:	CLASS 1E
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATION PROPOSED:

THE ABOVE INFORMATION IS APPLICABLE TO UNIT 3. A MODIFICATION IS IN PROGRESS TO UPGRADE UNIT 2 FROM A CATEGORY 3 INSTALLATION TO THAT SHOWN ABOVE (MOD 603B).

SCHEDULE FOR UPGRADE:

UNIT 2: TO BE INSTALLED DURING THE NEXT REFUELING OUTAGE.
UNIT 3: COMPLETE

VARIABLE NO. D7

DESCRIPTION:	DRYWELL ATMOSPHERE TEMPERATURE	INSTALLED RANGE:	-150 TO +300 DEGREES F
REQUIRED RANGE:	40 TO 440 DEGREES F	ENVIRONMENTAL QUALIFICATION:	NO
CATEGORY:	2	SEISMIC QUALIFICATION:	NA
PURPOSE:	TO MONITOR OPERATION	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	1 CHANNEL; ADDITIONAL CATEGORY 3 TEMPERATURE SENSORS ARE AVAILABLE IN THE DRYWELL.
		<u>SENSOR(S):</u> TE-2501(3501)-36A,B	<u>LOCATION:</u> DRYWELL
		POWER SUPPLY:	CLASS 1E
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

A MODIFICATION HAS BEEN INITIATED TO INSTALL ENVIRONMENTALLY QUALIFIED TEMPERATURE SENSORS (MOD 893C). AN ADDITIONAL MODIFICATION WILL BE INITIATED TO MODIFY THE RANGE OF THE INDICATION.

SCHEDULE FOR UPGRADE:

- 1) FOR MODIFICATION 893C: THE NEXT REFUELING OUTAGE FOR EACH UNIT
- 2) THE RANGE MODIFICATION WILL BE COMPLETED BY THE END OF THE SECOND REFUELING OUTAGE FOR EACH UNIT FOLLOWING THE SPRING 1984 UNIT 2 REFUELING OUTAGE.

VARIABLE NO. D8

DESCRIPTION:	DRYWELL SPRAY FLOW	INSTALLED RANGE:	0 TO 25,000 GPM.
REQUIRED RANGE:	0-110% DESIGN FLOW (PEACH BOTTOM DESIGN FLOW IS 9,150 GPM).	NOTE:	A COMMON FLOW ELEMENT IS USED TO MEASURE DRYWELL SPRAY FLOW, SUPPRESSION POOL SPRAY FLOW, AND SUPPRESSION POOL COOLING FLOW.
CATEGORY:	2	ENVIRONMENTAL QUALIFICATION:	BEING EVALUATED; SEE MODIFICATIONS PROPOSED.
PURPOSE:	TO MONITOR OPERATION	SEISMIC QUALIFICATION:	NA
		QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	1 CHANNEL FOR THE "A" LOOP 1 CHANNEL FOR THE "B" LOOP
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		FT 2(3)-10-111A,B	REACTOR BUILDING
		POWER SUPPLY:	ONSITE POWER
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

THE DRYWELL SPRAYS ARE USED TO CONTROL THE PRESSURE AND TEMPERATURE IN THE DRYWELL. THE FLOW TO THE SPRAYS IS MONITORED BY A FLOW ELEMENT WHICH IS COMMON TO BOTH THE DRYWELL AND SUPPRESSION POOL SPRAY LINES AND THE SUPPRESSION POOL COOLING WATER LINE. THE OPERATOR CAN VERIFY THAT THE INDICATED FLOW IS THE FLOW THAT IS BEING DIVERTED TO THE DRYWELL SPRAYS BY OBSERVING THE POSITION (IN THE MAIN CONTROL ROOM) OF THE VALVES IN THE DRYWELL SPRAY, SUPPRESSION POOL SPRAY, AND SUPPRESSION POOL COOLING WATER LINE. THE FLOW TO THE DRYWELL SPRAYS IS ALSO REGULATED BY A THROTTLING VALVE. THE POSITION OF THIS VALVE IS INDICATED IN THE MAIN CONTROL ROOM. THE EFFECTIVENESS OF THE FLOW CAN BE VERIFIED BY OBSERVING PRESSURE AND TEMPERATURE CHANGES IN THE DRYWELL.

IN CONSIDERATION OF THE ABOVE DISCUSSION, THE PEACH BOTTOM DESIGN, IN CONJUNCTION WITH OPERATING PRACTICE, PROVIDES FOR OPERATOR INFORMATION THAT IS SUFFICIENT FOR DETERMINING THE EXISTENCE OF SPRAY FLOWS TO THE DRYWELL WITHOUT THE USE OF A DEDICATED FLOW-MEASURING INSTRUMENT.

MODIFICATIONS PROPOSED:

SUFFICIENT DOCUMENTATION DOES NOT EXIST AT THIS TIME TO PROVE THE ENVIRONMENTAL QUALIFICATION OF THE FLOW TRANSMITTERS. SUCH DOCUMENTATION WILL BE OBTAINED OR THE TRANSMITTERS WILL BE REPLACED WITH ENVIRONMENTALLY QUALIFIED FLOW TRANSMITTERS.

SCHEDULE FOR UPGRADE:

BY THE END OF THE SECOND REFUELING OUTAGE FOR EACH UNIT FOLLOWING THE SPRING 1984 UNIT 2 REFUELING OUTAGE.

VARIABLE NO. 09

DESCRIPTION:	MAIN STEAMLINE ISOLATION VALVES' LEAKAGE CONTROL SYSTEM PRESSURE	INSTALLED RANGE:	NA TO PEACH BOTTOM
REQUIRED RANGE:	0-15" OF WATER (NARROW RANGE) AND 0 TO 5 PSID (WIDE RANGE)	ENVIRONMENTAL QUALIFICATION:	
CATEGORY:	2	SEISMIC QUALIFICATION:	
PURPOSE:	TO PROVIDE INDICATION OF PRESSURE BOUNDARY MAINTENANCE	QUALITY ASSURANCE:	
		REDUNDANCY:	
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		POWER SUPPLY:	
		LOCATION OF DISPLAY:	

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

THIS INSTRUMENTATION IS NOT REQUIRED SINCE PEACH BOTTOM DOES NOT HAVE A MAIN STEAM LINE ISOLATION VALVE LEAKAGE CONTROL SYSTEM.

MODIFICATIONS PROPOSED:

SCHEDULE FOR UPGRADE:

VARIABLE NO. 010

DESCRIPTION:	PRIMARY SYSTEM SAFETY RELIEF VALVE POSITION, INCLUDING ADS OR FLOW THROUGH OR PRESSURE IN VALVE LINES	INSTALLED RANGE:	OPEN, CLOSED, OPEN PREVIOUSLY
REQUIRED RANGE:	CLOSED-NOT CLOSED OR 0 TO 50 PSIG	ENVIRONMENTAL QUALIFICATION:	YES
CATEGORY:	2	SEISMIC QUALIFICATION:	YES
PURPOSE:	DETECTION OF ACCIDENT; BOUNDARY INTEGRITY INDICATION	QUALITY ASSURANCE:	1) FULL Q.A. PLAN APPLIED TO DESIGN, TESTING, AND INSTALLATION 2) COMMERCIAL GRADE PROCUREMENT
		REDUNDANCY:	1 CHANNEL PER RELIEF VALVE. CATEGORY 3 THERMOCOUPLES CAN BE USED AS A DIVERSE BACKUP TO THE POSITION SENSORS.
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		POT-2(3)-2-70A,B POT-2(3)-2-71A-H,J-L	DRYWELL DRYWELL
		POWER SUPPLY:	CLASS 1E
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

THE ABOVE INFORMATION IS APPLICABLE TO BOTH UNITS EXCEPT FOR THE SENSOR ENVIRONMENTAL QUALIFICATION IN UNIT 2. A MODIFICATION IS IN PROGRESS TO UPGRADE THE SENSORS IN UNIT 2 (MODIFICATION 575).

SCHEDULE FOR UPGRADE:

UNIT 2 - SENSORS TO BE UPGRADED DURING THE NEXT REFUELING CUTAGE
UNIT 3 - COMPLETE

VARIABLE NO. D11

DESCRIPTION:	ISOLATION CONDENSER SYSTEM SHELL-SIDE WATER LEVEL	INSTALLED RANGE:	NA TO PEACH BOTTOM
REQUIRED RANGE:	TOP TO BOTTOM	ENVIRONMENTAL QUALIFICATION:	
CATEGORY:	2	SEISMIC QUALIFICATION:	
PURPOSE:	TO MONITOR OPERATION	QUALITY ASSURANCE:	
		REDUNDANCY:	
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		POWER SUPPLY:	
		LOCATION OF DISPLAY:	

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

THIS INSTRUMENTATION IS NOT REQUIRED SINCE PEACH BOTTOM DOES NOT HAVE AN ISOLATION CONDENSER.

MODIFICATIONS PROPOSED:

SCHEDULE FOR UPGRADE:

VARIABLE NO. D12

DESCRIPTION: ISOLATION CONDENSER SYSTEM VALVE POSITION

INSTALLED RANGE:

NA TO PEACH BOTTOM

REQUIRED RANGE: OPEN OR CLOSED

ENVIRONMENTAL QUALIFICATION:

CATEGORY: 2

SEISMIC QUALIFICATION:

PURPOSE: TO MONITOR STATUS

QUALITY ASSURANCE:

REDUNDANCY:

SENSOR(S):

LOCATION:

POWER SUPPLY:

LOCATION OF DISPLAY:

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

THIS INSTRUMENTATION IS NOT REQUIRED SINCE PEACH BOTTOM DOES NOT HAVE AN ISOLATION CONDENSER.

MODIFICATIONS PROPOSED:

SCHEDULE FOR UPGRADE:

VARIABLE NO. 013

DESCRIPTION: RCIC FLOW

REQUIRED RANGE: 0-110% DESIGN FLOW (PEACH BOTTOM DESIGN FLOW IS 600 GPM)

CATEGORY: 2

PURPOSE: TO MONITOR OPERATION

INSTALLED RANGE: 0-700 GPM.

NOTE: THE RCIC SYSTEM HAS ONE BRANCH LINE - THE FULL FLOW TEST LINE - DOWNSTREAM OF THE FLOW ELEMENT. THE TEST LINE IS PROVIDED WITH A MOTOR-OPERATED VALVE (MO-2(3)-13-30) THAT IS NORMALLY CLOSED. FURTHER, THE VALVE IN THE TEST LINE CLOSSES AUTOMATICALLY WHEN THE EMERGENCY SYSTEM IS ACTUATED, THEREBY ENSURING THAT INDICATED FLOW IS NOT BEING DIVERTED BY THE TEST LINE. PROPER VALVE POSITION CAN BE VERIFIED BY DIRECT INDICATION OF VALVE POSITION. BASED ON THE ABOVE CONSIDERATIONS, THE EXISTING FLOW MEASUREMENT SCHEME IS ADEQUATE TO MEET THE INTENT OF REGULATORY GUIDE 1.97.

ENVIRONMENTAL QUALIFICATION: NO

SEISMIC QUALIFICATION: NA

QUALITY ASSURANCE: COMMERCIAL GRADE

REDUNDANCY: 1 CHANNEL

SENSOR(S):
FT-2(3)-13-58

LOCATION:
REACTOR BUILDING

POWER SUPPLY: STATION BATTERIES

LOCATION OF DISPLAY: MAIN CONTROL ROOM AND
REMOTE SHUTDOWN PANEL

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

A MODIFICATION WILL BE INITIATED TO INSTALL ENVIRONMENTALLY QUALIFIED FLOW TRANSMITTERS.

SCHEDULE FOR UPGRADE:

BY THE END OF THE SECOND REFUELING OUTAGE FOR EACH UNIT FOLLOWING THE SPRING 1984 UNIT 2 REFUELING OUTAGE.

VARIABLE NO. D14

DESCRIPTION:	HPCI FLOW	INSTALLED RANGE:	0-6,000 GPM. NOTE: THE HPCI
REQUIRED RANGE:	0-110% DESIGN FLOW (PEACH BOTTOM DESIGN FLOW IS 5,000 GPM)	SYSTEM HAS ONE BRANCH LINE, THE FULL FLOW TEST LINE ,	DOWNSTREAM OF THE FLOW MEASURING ELEMENT. THE TEST
CATEGORY:	2	LINE IS PROVIDED WITH THREE MOTOR-OPERATED VALVES	(MO-2(3)-23-21, MO-2(3)-23-31 AND MO-2(3)-23-24) THAT
PURPOSE:	TO MONITOR OPERATION	ARE NORMALLY CLOSED. THESE VALVES ALSO CLOSE	AUTOMATICALLY WHEN THE EMERGENCY SYSTEM IS ACTUATED.
		THIS ENSURES THAT THE INDICATED FLOW IS NOT	BEING DIVERTED BY THE TEST LINE. PROPER
		VALVE POSITION IS VERIFIED BY DIRECT INDICATION IN THE	MAIN CONTROL ROOM. BASED ON THE ABOVE DISCUSSION, THE
		EXISTING FLOW MEASUREMENT SCHEME IS ADEQUATE TO MEET THE	INTENT OF R.G. 1.97.
		ENVIRONMENTAL QUALIFICATION:	NO
		SEISMIC QUALIFICATION:	NA
		QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	1 CHANNEL
		SENSOR(S):	LOCATION:
		FT-2(3)-23-82	REACTOR BUILDING
		POWER SUPPLY:	STATION BATTERIES
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

A MODIFICATION WILL BE INITIATED TO INSTALL ENVIRONMENTALLY QUALIFIED FLOW TRANSMITTERS.

SCHEDULE FOR UPGRADE:

BY THE END OF THE SECOND REFUELING OUTAGE FOR EACH UNIT FOLLOWING THE SPRING 1984 UNIT 2 REFUELING OUTAGE.

VARIABLE NO. D15

DESCRIPTION: CORE SPRAY SYSTEM FLOW
REQUIRED RANGE: 0-110% DESIGN FLOW (PEACH BOTTOM DESIGN FLOW
IS 9,000 GPM)
CATEGORY: 2
PURPOSE: TO MONITOR OPERATION

INSTALLED RANGE: 0-10,000 GPM.
NOTE: THE CORE SPRAY SYSTEM HAS ONE BRANCH LINE - THE FULL FLOW
TEST LINE - DOWNSTREAM OF THE FLOW ELEMENT. THE TEST LINE
IS PROVIDED WITH A MOTOR-OPERATED VALVE (MO-2(3)-14-26A FOR
THE A AND C PUMP LOOPS, AND MO-2(3)-14-26B FOR THE B AND D
PUMP LOOPS) THAT IS NORMALLY CLOSED. FURTHER, THE VALVE IN
THE TEST LINE CLOSES AUTOMATICALLY WHEN THE EMERGENCY SYSTEM
IS ACTUATED, THEREBY INSURING THAT THE INDICATED FLOW IS NOT
BEING DIVERTED BY THE TEST LINE. PROPER VALVE POSITION CAN
BE VERIFIED BY DIRECT INDICATION OF VALVE POSITION. BASED
ON THE ABOVE DISCUSSION, THE EXISTING CORE SPRAY FLOW
MEASUREMENT SCHEME IS ADEQUATE TO MEET THE INTENT OF
REGULATORY GUIDE 1.97.

ENVIRONMENTAL QUALIFICATION: NO

SEISMIC QUALIFICATION: NO

QUALITY ASSURANCE: COMMERCIAL GRADE

REDUNDANCY: 1 CHANNEL FOR THE A AND C PUMPS

1 CHANNEL FOR THE B AND D PUMPS

SENSOR(S):
FT-2(3)-14-40A,B

LOCATION:
REACTOR BUILDING

POWER SUPPLY: ONSITE POWER

LOCATION OF DISPLAY: MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

A MODIFICATION WILL BE INITIATED TO INSTALL ENVIRONMENTALLY QUALIFIED FLOW TRANSMITTERS.

SCHEDULE FOR UPGRADE:

BY THE END OF THE SECOND REFUELING OUTAGE FOR EACH UNIT FOLLOWING THE SPRING 1984 UNIT 2 REFUELING OUTAGE.

VARIABLE NO. D16

DESCRIPTION: LPCI SYSTEM FLOW
REQUIRED RANGE: 0-110% DESIGN FLOW (PEACH BOTTOM DESIGN FLOW
IS 40,000 GPM)
CATEGORY: 2
PURPOSE: TO MONITOR OPERATION

INSTALLED RANGE: 0-50,000 GPM.
NOTE: ALTHOUGH THERE ARE SEVERAL BRANCH LINES DOWNSTREAM OF THE
LPCI FLOW ELEMENT, THIS DOES NOT PREVENT PROPER INDICATION
OF LPCI FLOW. THESE BRANCH LINES ARE NORMALLY CLOSED DURING
LPCI INJECTION. ADDITIONALLY, VALVE POSITION INDICATION
IS USED TO VERIFY THAT THE FLOW SENSED BY THE FLOW ELEMENT
IS THE FLOW DIRECTED TO THE LPCI INJECTION LINES.

ENVIRONMENTAL QUALIFICATION: NO

SEISMIC QUALIFICATION: NA

QUALITY ASSURANCE: COMMERCIAL GRADE

REDUNDANCY: 1 CHANNEL FOR A&C RHR PUMPS
AND 1 CHANNEL FOR THE B&D
RHR PUMPS

SENSOR(S):
FT-2(3)-10-109A,B

LOCATION:
REACTOR BUILDING

POWER SUPPLY: ONSITE POWER

LOCATION OF DISPLAY: MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

A MODIFICATION WILL BE INITIATED TO INSTALL ENVIRONMENTALLY QUALIFIED FLOW TRANSMITTERS.

SCHEDULE FOR UPGRADE:

BY THE END OF THE SECOND REFUELING OUTAGE FOR EACH UNIT FOLLOWING THE SPRING 1984 UNIT 2 REFUELING OUTAGE.

VARIABLE NO. D17

DESCRIPTION: SLCS FLOW
REQUIRED RANGE: 0 TO 110 % DESIGN FLOW
CATEGORY: 2
PURPOSE: TO MONITOR OPERATION

INSTALLED RANGE:

- 1) STANDBY LIQUID CONTROL SYSTEM
PRESSURE: 0-1500 PSIG (PEACH
BOTTOM PUMP DESIGN PRESSURE IS
1500 PSIG)
- 2) INDICATING LAMPS FOR PUMP
MOTOR STATUS
- 3) INDICATING LAMPS FOR SQUIB
VALVE STATUS

ENVIRONMENTAL QUALIFICATION: QUALIFIED FOR ATWS ENVIRONMENT
(SEE NOTE 1)

SEISMIC QUALIFICATION: NA

QUALITY ASSURANCE:

- 1) PUMP PRESSURE: PORTIONS HAVE
FULL Q.A. PLAN, THE REST IS
COMMERCIAL GRADE
- 2) PUMP MOTOR STATUS HAS FULL
Q.A. PLAN
- 3) SQUIB VALVE INDICATION HAS
FULL Q.A. PLAN

REDUNDANCY:

- 1) 1 CHANNEL FOR SLC PUMP
PRESSURE
- 2) INDICATING LAMPS FOR EACH
SLC MOTOR
- 3) INDICATING LAMPS FOR EACH
SQUIB VALVE

SENSOR(S):

- 1) FOR PUMP PRESSURE:
PT-2(3)-11-52
- 2) FOR PUMP MOTOR STATUS:
MOTOR CONTACTOR FOR EACH
PUMP MOTOR
- 3) FOR SQUIB VALVE
INDICATING LAMPS RELAY

LOCATION:

REACTOR BUILDING
REACTOR BUILDING
MAIN CONTROL ROOM

POWER SUPPLY:

ONSITE

LOCATION OF DISPLAY:

MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NO INSTRUMENTATION CURRENTLY EXISTS FOR MONITORING THE STANDBY LIQUID CONTROL (SLC) SYSTEM FLOW AT PEACH BOTTOM. THE PUMP DISCHARGE HEADER PRESSURE, WHICH IS INDICATED IN THE CONTROL ROOM, WILL INDICATE SLC PUMP OPERATION. IN ADDITION TO THE DISCHARGE HEADER PRESSURE INDICATION, THE OPERATOR CAN VERIFY THE PROPER FUNCTIONING OF THE SLC SYSTEM BY MONITORING THE FOLLOWING:

- 1) THE DECREASE IN THE LEVEL OF THE SODIUM PENTABORATE SOLUTION STORAGE TANK,
- 2) THE REACTIVITY CHANGE IN THE REACTOR AS MEASURED BY NEUTRON FLUX,
- 3) THE MOTOR CONTACTOR INDICATING LIGHTS, AND
- 4) THE SQUIB VALVE CONTINUITY INDICATING LIGHTS.

THE INSTRUMENTATION USED TO MONITOR THE ABOVE PARAMETERS MEETS THE REQUIREMENTS FOR CATEGORY 2 INSTRUMENTS. IN CONSIDERATION OF THE ABOVE DISCUSSION, THE EXISTING INSTRUMENTATION IS ACCEPTABLE TO MONITOR THE STANDBY LIQUID CONTROL SYSTEM FLOW.

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

NOTES:

- 1) THE SLC SYSTEM IS USED ONLY TO MITIGATE THE CONSEQUENCES OF AN ATWS EVENT. UNDER ATWS CIRCUMSTANCES, THE ENVIRONMENT IN WHICH THE INSTRUMENTATION IS LOCATED IS CONSIDERED A MILD ENVIRONMENT FOR EQUIPMENT QUALIFICATION PURPOSES. A DETAILED ANALYSIS WILL BE PERFORMED TO VERIFY THIS ENVIRONMENT WHEN THE ATWS RULE IS FINALIZED.

VARIABLE NO. D18

DESCRIPTION: SLCS STORAGE TANK LEVEL
REQUIRED RANGE: TOP TO BOTTOM
CATEGORY: 2
PURPOSE: TO MONITOR OPERATION

INSTALLED RANGE: TOP TO BOTTOM. NOTE:
THE INSTRUMENTATION MEASURES THE LIQUID LEVEL 7" FROM THE
BOTTOM OF THE TANK TO 130.25". THE PUMP SUCTION NOZZLE IS
MOUNTED 4.75" FROM THE BOTTOM OF THE TANK. TO MEASURE ANY
LOWER THAN 7" WOULD LEAD THE OPERATOR TO BELIEVE THAT MORE
LIQUID IS AVAILABLE FOR PUMPING WHEN IN REALITY, DUE TO
INSTRUMENT INACCURACY, THERE IS NO LIQUID AVAILABLE.
THE POTENTIAL FOR PUMP DAMAGE EXISTS. THE UPPER LIMIT OF
130.25" IS THE LEVEL AT WHICH THE LIQUID BEGINS TO LEAVE THE
TANK THROUGH THE TANK OVERFLOW NOZZLE. BASED ON THE ABOVE
CONSIDERATIONS, THE RANGE REQUIREMENT OF REGULATORY GUIDE 1.97
FOR THIS VARIABLE IS MET BY EXISTING INSTRUMENTATION.

ENVIRONMENTAL QUALIFICATION: YES; QUALIFIED FOR ATWS
ENVIRONMENT. (SEE NOTE 1).

SEISMIC QUALIFICATION: NA

QUALITY ASSURANCE: COMMERCIAL GRADE

REDUNDANCY: 1 CHANNEL

SENSOR(S):
LT-2(3)-11-45

LOCATION:
REACTOR BUILDING

POWER SUPPLY: ONSITE POWER FOR THE
INSTRUMENTATION; A COMBINATION
OF ONSITE AND OFFSITE SOURCES FOR
THE REDUNDANT INSTRUMENT AIR
COMPRESSORS.

LOCATION OF DISPLAY: MAIN CONTROL ROOM AND THE
STANDBY LIQUID CONTROL
INSTRUMENTATION RACK.

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

NOTES:

- 1) SINCE THE SLC SYSTEM IS USED TO MITIGATE THE CONSEQUENCES OF AN ATWS EVENT, UNDER ATWS CIRCUMSTANCES, THE ENVIRONMENT IN WHICH THE INSTRUMENTATION IS LOCATED IS CONSIDERED A MILD ENVIRONMENT FOR EQUIPMENT QUALIFICATION PURPOSES. A DETAILED ANALYSIS WILL BE PERFORMED TO VERIFY THIS ENVIRONMENT WHEN THE ATWS RULE IS FINALIZED.

VARIABLE NO. DIS

DESCRIPTION:	RHR SYSTEM FLOW	INSTALLED RANGE:	0-50,000 GPM
REQUIRED RANGE:	0-110% DESIGN FLOW (PEACH BOTTOM DESIGN FLOW IS 40,000 GPM)	ENVIRONMENTAL QUALIFICATION:	NO
CATEGORY:	2	SEISMIC QUALIFICATION:	NA
PURPOSE:	TO MONITOR OPERATION	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	1 CHANNEL FOR THE A&C RHR PUMPS AND 1 CHANNEL FOR THE B&D RHR PUMPS
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		FT-2(3)-10-109A,B	REACTOR BUILDING
		POWER SUPPLY:	ONSITE POWER
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

A MODIFICATION IS TO BE INITIATED TO INSTALL ENVIRONMENTALLY QUALIFIED FLOW TRANSMITTERS.

SCHEDULE FOR UPGRADE:

BY THE END OF THE SECOND REFUELING OUTAGE FOR EACH UNIT FOLLOWING THE SPRING 1984 UNIT 2 REFUELING OUTAGE.

VARIABLE NO. D20

DESCRIPTION:	RHR HEAT EXCHANGER OUTLET TEMPERATURE	INSTALLED RANGE:	0-600 DEGREES F
REQUIRED RANGE:	40 TO 350 DEGREES F	ENVIRONMENTAL QUALIFICATION:	BEING EVALUATED; SEE MODIFICATIONS PROPOSED.
CATEGORY:	2	SEISMIC QUALIFICATION:	NA
PURPOSE:	TO MONITOR OPERATION	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	1 CHANNEL FOR EACH HEAT EXCHANGER
		<u>SENSOR(S):</u> TE-2(3)-10-116A,B,C,D	<u>LOCATION:</u> REACTOR BUILDING
		POWER SUPPLY:	UNINTERRUPTIBLE POWER (ONSITE SOURCE BACKED BY STATION BATTERIES)
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

SUFFICIENT DOCUMENTATION DOES NOT EXIST AT THIS TIME TO PROVE THE ENVIRONMENTAL QUALIFICATION OF THE HEAT EXCHANGER OUTLET TEMPERATURE THERMOCOUPLES. SUCH DOCUMENTATION WILL BE OBTAINED OR THE THERMOCOUPLES WILL BE REPLACED WITH ENVIRONMENTALLY QUALIFIED THERMOCOUPLES.

SCHEDULE FOR UPGRADE:

BY THE END OF THE SECOND REFUELING OUTAGE FOR EACH UNIT FOLLOWING THE SPRING 1984 UNIT 2 REFUELING OUTAGE.

VARIABLE NO. D21

DESCRIPTION:	COOLING WATER TEMPERATURE TO ESF SYSTEM COMPONENTS	INSTALLED RANGE:	THE REACTOR CORE ISOLATION COOLING (RCIC) ROOM AND THE HIGH PRESSURE COOLANT INJECTION ROOM (HPCI) TEMPERATURE SENSORS HAVE A RANGE OF 0 TO 600 DEGREES F.
REQUIRED RANGE:	40 TO 200 DEGREES F	ENVIRONMENTAL QUALIFICATION:	YES
CATEGORY:	2	SEISMIC QUALIFICATION:	NA
PURPOSE:	TO MONITOR OPERATION	QUALITY ASSURANCE:	FULL Q.A. PLAN
		REDUNDANCY:	4 TEMPERATURE SENSORS IN THE RCIC PUMP ROOM AND 4 TEMPERATURE SENSORS IN THE HPCI PUMP ROOM.
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		ROOM TEMPERATURE SENSORS:	
		TE-4936 (5936) A,B,C,D	REACTOR BUILDING
		TE-4941 (5941) A,B,C,D	REACTOR BUILDING
		POWER SUPPLY:	STATION BATTERIES
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

THE EMERGENCY SERVICE WATER SYSTEM IS A ONCE-THROUGH COOLING WATER SYSTEM. HENCE, THE SYSTEM TEMPERATURE WILL BE THE SAME AS THE RIVER WATER TEMPERATURE. THIS SYSTEM PROVIDES COOLING WATER TO THE FOLLOWING ENGINEERED SAFETY FEATURES COMPONENTS:

- 1) CORE SPRAY PUMP ROOM COOLERS.
- 2) RHR PUMP ROOM COOLERS AND RHR PUMP SEAL WATER COOLERS.
- 3) HPCI PUMP ROOM UNIT COOLERS.
- 4) RCIC PUMP ROOM UNIT COOLERS.
- 5) THE DIESEL GENERATOR COOLING WATER JACKETS.

NO SYSTEM TEMPERATURE IS PROVIDED FOR THE EMERGENCY SERVICE WATER SYSTEM. AS AN ALTERNATE, THE RCIC AND HPCI PUMP ROOMS EACH HAVE 4 TEMPERATURE SENSORS MOUNTED IN THE ROOM WHICH MEASURE ROOM TEMPERATURE. EACH OF THESE TEMPERATURE SENSORS TRANSMITS A SIGNAL TO AN INDICATOR LOCATED IN THE MAIN CONTROL ROOM. AN IMPROPER TEMPERATURE CONDITION OF THE EMERGENCY SERVICE WATER SYSTEM WOULD CAUSE A HIGH TEMPERATURE CONDITION IN THE HPCI AND RCIC PUMP ROOMS. THE HIGH TEMPERATURE CONDITION WOULD BE ANNUNCIATED IN THE MAIN CONTROL ROOM BY ADDITIONAL TEMPERATURE SENSORS AS DESCRIBED BELOW, AND WOULD BE VERIFIED USING THE TEMPERATURE INDICATORS IN THE MAIN CONTROL ROOM.

IN ADDITION TO THE ROOM TEMPERATURE SENSORS LISTED ABOVE, A COMBINATION OF CATEGORY 2 AND 3 ROOM TEMPERATURE SENSORS AND INDICATORS EXIST IN THE FOLLOWING LOCATIONS:

<u>SENSOR (ROOM TEMPERATURE)</u>	<u>LOCATION</u>	<u>CONTROL ROOM INDICATION</u>
TE-2501(3501)-51	'A' CORE SPRAY PUMP ROOM	INDICATOR
TE-2501(3501)-53	'B' CORE SPRAY PUMP ROOM	INDICATOR
TE-2501(3501)-52	'C' CORE SPRAY PUMP ROOM	INDICATOR
TE-2501(3501)-54	'D' CORE SPRAY PUMP ROOM	INDICATOR
TE-2501(3501)-55	'A' RHR PUMP ROOM	INDICATOR
TE-2501(3501)-57	'B' RHR PUMP ROOM	INDICATOR
TE-2501(3501)-56	'C' RHR PUMP ROOM	INDICATOR
TE-2501(3501)-58	'D' RHR PUMP ROOM	INDICATOR
TE-2501(3501)-50	HPCI PUMP ROOM	INDICATOR
TE-2501(3501)-49	RCIC PUMP ROOM	INDICATOR
TE-2(3)-10-98A	'A' RHR PUMP ROOM	ALARM AND INDICATOR
TE-2(3)-10-98B	'B' RHR PUMP ROOM	ALARM AND INDICATOR
TE-2(3)-10-98C	'C' RHR PUMP ROOM	ALARM AND INDICATOR
TE-2(3)-10-98D	'D' RHR PUMP ROOM	ALARM AND INDICATOR
TE-2(3)-23-105A	HPCI PUMP ROOM	ALARM AND INDICATOR
TE-2(3)-13-77A	RCIC PUMP ROOM	ALARM AND INDICATOR
DIESEL GENERATOR	DIESEL BUILDING	ALARM
WATER JACKET TEMPERATURE SWITCHES		

IN ADDITION TO THE ABOVE ROOM TEMPERATURE SENSORS, THE EMERGENCY SERVICE WATER PUMP OUTPUT PRESSURE IS INDICATED IN THE MAIN CONTROL ROOM. THIS IS A FURTHER VERIFICATION OF PROPER SYSTEM OPERATION.

BASED ON THE ABOVE DISCUSSION, THE MANY INDICATIONS FROM EXISTING INSTRUMENTATION ARE ADEQUATE TO MONITOR THE PROPER OPERATION OF THE EMERGENCY SERVICE WATER SYSTEM.

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. D22

DESCRIPTION:	COOLING WATER FLOW TO ESF SYSTEM COMPONENTS	INSTALLED RANGE:	THE REACTOR CORE ISOLATION COOLING (RCIC) ROOM AND THE HIGH PRESSURE COOLANT INJECTION ROOM (HPCI) TEMPERATURE SENSORS HAVE A RANGE OF 0 TO 600 DEGREES F
REQUIRED RANGE:	0 TO 110 % DESIGN FLOW	ENVIRONMENTAL QUALIFICATION:	YES
CATEGORY:	2	SEISMIC QUALIFICATION:	NA
PURPOSE:	TO MONITOR OPERATION	QUALITY ASSURANCE:	FULL Q.A. PLAN
		REDUNDANCY:	4 TEMPERATURE SENSORS IN THE RCIC PUMP ROOM AND 4 TEMPERATURE SENSORS IN THE HPCI PUMP ROOM.
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		ROOM TEMPERATURE SENSORS: TE-4936 (5936) A,B,C,D TE-4941 (5941) A,B,C,D	REACTOR BUILDING REACTOR BUILDING
		POWER SUPPLY:	STATION BATTERIES
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

THE EMERGENCY SERVICE WATER SYSTEM PROVIDES COOLING WATER TO THE FOLLOWING ENGINEERED SAFETY FEATURES COMPONENTS:

- 1) CORE SPRAY PUMP ROOM COOLERS.
- 2) RHR PUMP ROOM COOLERS AND RHR PUMP SEAL WATER COOLERS.
- 3) HPCI PUMP ROOM UNIT COOLERS.
- 4) RCIC PUMP ROOM UNIT COOLERS.
- 5) THE DIESEL GENERATOR COOLING WATER JACKETS.

NO SYSTEM FLOW IS PROVIDED FOR THE EMERGENCY SERVICE WATER SYSTEM. AS AN ALTERNATE, THE RCIC AND HPCI PUMP ROOMS EACH HAVE FOUR TEMPERATURE SENSORS MOUNTED IN THE ROOM WHICH MEASURE ROOM TEMPERATURE. EACH OF THESE TEMPERATURE SENSORS TRANSMITS A SIGNAL TO AN INDICATOR LOCATED IN THE MAIN CONTROL ROOM. AN IMPROPER FLOW CONDITION OF THE EMERGENCY SERVICE WATER SYSTEM WOULD CAUSE A HIGH TEMPERATURE CONDITION IN THE ROOM. THE HIGH TEMPERATURE CONDITION WOULD BE ANNUNCIATED IN THE MAIN CONTROL ROOM BY ADDITIONAL TEMPERATURE SENSORS AS DESCRIBED BELOW, AND WOULD BE VERIFIED USING THE TEMPERATURE INDICATORS IN THE MAIN CONTROL ROOM.

IN ADDITION TO THE ABOVE ROOM TEMPERATURE SENSORS, A COMBINATION OF CATEGORY 2 AND 3 ROOM TEMPERATURE SENSORS AND INDICATORS EXIST IN THE FOLLOWING LOCATIONS:

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SENSOR (ROOM TEMPERATURE)	LOCATION	CONTROL ROOM INDICATION
TE-2501(3501)-51	'A' CORE SPRAY PUMP ROOM	INDICATOR
TE-2501(3501)-53	'B' CORE SPRAY PUMP ROOM	INDICATOR
TE-2501(3501)-52	'C' CORE SPRAY PUMP ROOM	INDICATOR
TE-2501(3501)-54	'D' CORE SPRAY PUMP ROOM	INDICATOR
TE-2501(3501)-55	'A' RHR PUMP ROOM	INDICATOR
TE-2501(3501)-57	'B' RHR PUMP ROOM	INDICATOR
TE-2501(3501)-56	'C' RHR PUMP ROOM	INDICATOR
TE-2501(3501)-58	'D' RHR PUMP ROOM	INDICATOR
TE-2501(3501)-50	HPCI PUMP ROOM	INDICATOR
TE-2501(3501)-49	RCIC PUMP ROOM	INDICATOR
TE-2(3)-10-98A	'A' RHR PUMP ROOM	ALARM AND INDICATOR
TE-2(3)-10-98B	'B' RHR PUMP ROOM	ALARM AND INDICATOR
TE-2(3)-10-98C	'C' RHR PUMP ROOM	ALARM AND INDICATOR
TE-2(3)-10-98D	'D' RHR PUMP ROOM	ALARM AND INDICATOR
TE-2(3)-23-105A	HPCI PUMP ROOM	ALARM AND INDICATOR
TE-2(3)-13-77A	RCIC PUMP ROOM	ALARM AND INDICATOR
DIESEL GENERATOR	DIESEL BUILDING	ALARM
WATER JACKET TEMPERATURE		

IN ADDITION TO THE ABOVE MONITORING, THE EMERGENCY SERVICE WATER PUMP OUTPUT PRESSURE IS INDICATED IN THE MAIN CONTROL ROOM. THIS IS A FURTHER VERIFICATION OF PROPER SYSTEM OPERATION.

BASED ON THE ABOVE DISCUSSION, THE MANY INDICATIONS FROM EXISTING INSTRUMENTATION ARE ADEQUATE TO MONITOR THE PROPER OPERATION OF THE EMERGENCY SERVICE WATER SYSTEM.

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. D23

DESCRIPTION: HIGH RADIOACTIVITY LIQUID TANK LEVEL
INCLUDES:

1. WASTE COLLECTOR TANK
2. WASTE SURGE COLLECTOR TANK
3. FLOOR DRAIN COLLECTOR TANK
4. FLOOR DRAIN SURGE TANK

REQUIRED RANGE: TOP TO BOTTOM

CATEGORY: 3

PURPOSE: TO MONITOR OPERATION

INSTALLED RANGE: 0-100% LEVEL (TOP TO BOTTOM)

ENVIRONMENTAL QUALIFICATION: NA

SEISMIC QUALIFICATION: NA

QUALITY ASSURANCE: COMMERCIAL GRADE

REDUNDANCY: 1 CHANNEL PER TANK

SENSOR(S):
(WASTE COLLECTOR TANK)
LT-0-20-369
(WASTE SURGE COLLECTOR TANK)
LT-0-20-395
(FLOOR DRAIN COLLECTOR TANK)
LT-0-20-420
(FLOOR DRAIN SURGE TANK)
LT-0-20-454

LOCATION:
RADWASTE BUILDING
RADWASTE BUILDING
RADWASTE BUILDING
RADWASTE BUILDING

POWER SUPPLY: UNINTERRUPTIBLE POWER
(ONSITE SOURCES BACKED BY
STATION BATTERIES)

LOCATION OF DISPLAY: RADWASTE CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. D24

DESCRIPTION:	EMERGENCY VENTILATION DAMPER POSITION	INSTALLED RANGE:	OPEN/CLOSED INDICATING LAMPS
REQUIRED RANGE:	OPEN-CLOSED STATUS	ENVIRONMENTAL QUALIFICATION:	YES
CATEGORY:	2	SEISMIC QUALIFICATION:	NA
PURPOSE:	TO MONITOR OPERATION	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	SINGLE INDICATION PER DAMPER
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		LIMIT SWITCHES ASSOCIATED WITH DAMPERS:	REACTOR BUILDING
		AD-20452(30452)	
		AD-20453(30453)	
		AD-20457(30457)	
		AD-20458(30458)	
		AD-20459(30459)	
		AD-20460(30460)	
		AD-20461(30461)	
		AD-20462(30462)	
		AD-20463(30463)	
		AD-20464(30464)	
		AD-20467(30467)	
		AD-20468(30468)	
		PO-00153-1	RADWASTE BUILDING
		PO-00153-2	
		POWER SUPPLY:	ONSITE
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

A MODIFICATION IS TO BE INITIATED TO ADD DAMPER POSITION INDICATION TO TWO CONTROL ROOM DAMPERS.

SCHEDULE FOR UPGRADE:

BY THE END OF THE SECOND REFUELING OUTAGE FOR EACH UNIT FOLLOWING THE SPRING 1984 UNIT 2 REFUELING OUTAGE.

VARIABLE NO. D25 - PART 1

(STATUS OF STANDBY ELECTRICAL SUPPLIES - INVERTER OUTPUT BUSES VOLTAGE AND CURRENT)

DESCRIPTION:	STATUS OF STANDBY POWER AND OTHER ENERGY SOURCES INSTALLED RANGE: IMPORTANT TO SAFETY (ELECTRONIC, HYDRAULIC, PNEUMATIC) (VOLTAGES, CURRENTS, PRESSURES)	TWO ALARMS ARE PROVIDED IN THE MAIN CONTROL ROOM TO INDICATE: 1) INVERTER TROUBLE AND 2) INVERTER D.C. SUPPLY UNDER- VOLTAGE. THERE ARE ALSO CURRENT AND VOLTAGE METERS MOUNTED LOCALLY ON THE INVERTER. THE RANGE OF THE VOLTMETER IS: 0 TO 150 VAC. THE RANGE OF THE CURRENT METER IS 0 TO 300 AMPS A.C.
REQUIRED RANGE:	PLANT SPECIFIC	
CATEGORY:	2	
PURPOSE:	TO MONITOR SYSTEM STATUS	
	ENVIRONMENTAL QUALIFICATION:	YES
	SEISMIC QUALIFICATION:	NA
	QUALITY ASSURANCE:	COMMERCIAL GRADE
	REDUNDANCY:	1 CURRENT AND VOLTMETER PLUS 2 ALARMS
	<u>SENSOR(S):</u>	<u>LOCATION:</u>
	1) VOLTAGE AND CURRENT METERS	TURBINE BUILDING
	2) UNDERVOLTAGE RELAYS	TURBINE BUILDING
	POWER SUPPLY:	STATION BATTERIES AND ONSITE SOURCES
	LOCATION OF DISPLAY:	1) METERS: TURBINE BUILDING 2) ALARMS: MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. D25 - PART 2
(STATUS OF STANDBY ELECTRICAL SUPPLIES - D.C. BUS VOLTAGE AND CURRENT)

DESCRIPTION: STATUS OF STANDBY POWER AND OTHER ENERGY SOURCES IMPORTANT TO SAFETY (ELECTRONIC, HYDRAULIC, PNEUMATIC) (VOLTAGES, CURRENTS, PRESSURES)

REQUIRED RANGE: PLANT SPECIFIC

CATEGORY: 2

PURPOSE: TO MONITOR SYSTEM STATUS

INSTALLED RANGE: THE OUTPUT OF THE SAFEGUARD DESIGNATED 125/250 VDC STATION BATTERIES IS MONITORED BY VOLTAGE TRANSDUCERS (RANGE 0-300 VOLTS) WHICH INPUT TO THE PLANT COMPUTER. A COMPUTER TERMINAL TO DISPLAY THIS VOLTAGE IS LOCATED IN THE MAIN CONTROL ROOM. IN ADDITION, AN UNDER-VOLTAGE RELAY ON EACH 250 VDC BUS AND THE MAIN 400 AMP 125 VDC DISTRIBUTION PANELS ARE AVAILABLE WHICH ACTUATE CONTROL ROOM ALARMS. THE ALARM INDICATION MEETS CATEGORY 3 REQUIREMENTS. ALSO, A VOLTAGE AND CURRENT METER ON THE FRONT OF EACH BATTERY CHARGER (ASSOCIATED WITH THE BATTERIES ABOVE) IS ACCESSIBLE DURING AND FOLLOWING AN ACCIDENT. THE RANGE OF THE VOLTMETER IS 0 TO 150 VDC. THE RANGE OF THE CURRENT METER IS 0 TO 250 AMPS D.C.

ENVIRONMENTAL QUALIFICATION: YES, EXCEPT FOR THE UNDERVOLTAGE RELAYS.

SEISMIC QUALIFICATION: NA

QUALITY ASSURANCE: BATTERY CHARGER METERS: FULL Q.A. PLAN

UNDERVOLTAGE RELAYS AND ASSOCIATED ALARMS: COMMERCIAL GRADE

VOLTAGE TRANSDUCERS AND COMPUTER INDICATION: COMMERCIAL GRADE.

REDUNDANCY: SEE "1. TALLED RANGE" ABOVE

SENSOR(S):
VOLTAGE TRANSDUCERS
2(3)AD38, 2(3)BD38
MONITORING SAFEGUARD
BATTERIES
2(3)AD01, 2(3)CD01,
2(3)BD01, 2(3)DD01.

LOCATION:
1) TURBINE BUILDING

2) AN UNDERVOLTAGE RELAY ON EACH 250 VDC BUS AND EACH MAIN 400 AMP 125 VDC DISTRIBUTION PANEL (SUPPLIED FROM THE ABOVE BATTERIES) PROVIDING ALARMS IN THE MAIN CONTROL ROOM.

2) TURBINE, REACTOR AND RADWASTE BUILDINGS.

3) VOLTAGE AND CURRENT
METERS ON THE FRONT OF EACH
BATTERY CHARGER.

3) TURBINE BUILDING

POWER SUPPLY:

STATION BATTERIES FOR THE CONTROL
ROOM ALARMS AND THE BATTERY
CHARGER METERS; ONSITE SOURCE FOR
THE VOLTAGE TRANSDUCERS, AND
ONSITE SOURCE BACKED BY STATION
BATTERIES FOR THE PLANT COMPUTER.

LOCATION OF DISPLAY:

ALARMS AND COMPUTER DISPLAY:
MAIN CONTROL ROOM

BATTERY CHARGER METERS: TURBINE
BUILDING

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. 025 - PART 3
(STATUS OF STANDBY ELECTRICAL SUPPLIES - EMERGENCY BUS VOLTAGE AND CURRENT)

DESCRIPTION:	STATUS OF STANDBY POWER AND OTHER ENERGY SOURCES IMPORTANT TO SAFETY (ELECTRONIC, HYDRAULIC, PNEUMATIC) (VOLTAGES, CURRENTS, PRESSURES)	INSTALLED RANGE:	VOLTAGE: 0-5250 VOLTS CURRENT: 0-800 AMPS
REQUIRED RANGE:	PLANT SPECIFIC	ENVIRONMENTAL QUALIFICATION:	YES
CATEGORY:	2	SEISMIC QUALIFICATION:	YES
PURPOSE:	TO MONITOR SYSTEM STATUS	QUALITY ASSURANCE:	FULL Q.A. PLAN
		REDUNDANCY:	1 CHANNEL PER BUS
		<u>SENSOR(S):</u> VOLTAGE AND CURRENT TRANSFORMERS LOCATED ON EACH OF 4 EMERGENCY BUSES.	<u>LOCATION:</u> TURBINE BUILDING SWITCHGEAR ROOMS
		POWER SUPPLY:	ONSITE POWER SOURCES
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. 025 - PART 4

(STATUS OF STANDBY PNEUMATIC SUPPLIES - DRYWELL PURGE, VENT, AND VACUUM BREAKER VALVES; NITROGEN PRESSURE AVAILABLE)

DESCRIPTION:	STATUS OF STANDBY POWER AND OTHER ENERGY SOURCES IMPORTANT TO SAFETY (ELECTRIC, HYDRAULIC, PNEUMATIC) (VOLTAGES, CURRENTS, PRESSURES)	INSTALLED RANGE:	ANNUNCIATOR ALARMS INDICATE LOW NITROGEN PRESSURE TO THE VALVES
REQUIRED RANGE:	PLANT SPECIFIC	ENVIRONMENTAL QUALIFICATION:	SEE "MODIFICATIONS PROPOSED."
CATEGORY:	2	SEISMIC QUALIFICATION:	NA
PURPOSE:	TO MONITOR SYSTEM STATUS	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	1 PRESSURE SWITCH FOR EACH VALVE.

<u>SENSOR(S):</u> <u>VALVE#</u>	<u>PRESSURE SWITCH</u>	<u>LOCATION</u>
AO-2505 (3505)	PS-8087H (9087H)	REACTOR BUILDING
AO-2506 (3506)	PS-8087C (9087C)	REACTOR BUILDING
AO-2507 (3507)	PS-8087E (9087E)	REACTOR BUILDING
AO-2511 (3511)	PS-8087B (9087B)	REACTOR BUILDING
AO-2512 (3512)	PS-8087F (9087F)	REACTOR BUILDING
AO-2519 (3519)	PS-8087G (9087G)	REACTOR BUILDING
AO-2520 (3520)	PS-8087A (9087A)	REACTOR BUILDING
AO-2521A (3521A)	PS-8087J (9087J)	REACTOR BUILDING
AO-2521B (3521B)	PS-8087D (9087D)	REACTOR BUILDING
AO-2502A (3502A)	PS-2502A (3502A)	REACTOR BUILDING
AO-2502B (3502B)	NONE	NA

POWER SUPPLY:	ONSITE FOR THE ALARM RELAYS; STATION BATTERIES FOR THE ANNUNCIATORS
LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

SUFFICIENT DOCUMENTATION DOES NOT EXIST AT THIS TIME TO PROVE THE ENVIRONMENTAL QUALIFICATION OF THE PRESSURE SWITCHES. SUCH DOCUMENTATION WILL BE OBTAINED OR THE SWITCHES WILL BE REPLACED WITH ENVIRONMENTALLY QUALIFIED SWITCHES. IN ADDITION, PRESSURE INDICATION IS TO BE ADDED TO MONITOR THE STATUS OF THE AIR SUPPLY TO AO-2502B (3502B).

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SCHEDULE FOR UPGRADE:

BY THE END OF THE SECOND REFUELING OUTAGE FOR EACH UNIT FOLLOWING THE SPRING 1984 UNIT 2 REFUELING OUTAGE.

VARIABLE NO. 025 - PART 5
(STATUS OF STANDBY PNEUMATIC SUPPLIES - ADS VALVES AIR SUPPLIES)

DESCRIPTION:	STATUS OF STANDBY POWER AND OTHER ENERGY SOURCES IMPORTANT TO SAFETY (ELECTRONIC, HYDRAULIC, PNEUMATIC) (VOLTAGES, CURRENTS, PRESSURES)	INSTALLED RANGE:	INDICATOR 0-225 PSIG AND ANNUNCIATOR ALARMS FOR HIGH AND LOW PRESSURE
REQUIRED RANGE:	PLANT SPECIFIC	ENVIRONMENTAL QUALIFICATION:	YES
CATEGORY:	2	SEISMIC QUALIFICATION:	NA
PURPOSE:	TO MONITOR SYSTEM STATUS	QUALITY ASSURANCE:	FULL Q.A. PLAN FOR THE INDICATION; COMMERCIAL GRADE FOR THE ANNUNCIATORS
		REDUNDANCY:	1 ANALOG INDICATOR AND 1 ANNUNCIATOR FOR EACH UNIT
		<u>SENSOR(S):</u> PT-8142 (9142)A PT-8142 (9142)B	<u>LOCATION:</u> REACTOR BUILDING REACTOR BUILDING
		POWER SUPPLY:	ONSITE SUPPLIES FOR THE INDICATOR; STATION BATTERIES FOR THE ANNUNCIATORS
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. 025 - PART 6

(STATUS OF STANDBY PNEUMATIC SUPPLIES - INSTRUMENT AIR TO CONTAINMENT ATMOSPHERE DILUTION (CAD) SUPPLY VALVES)

DESCRIPTION:	STATUS OF STANDBY POWER AND OTHER ENERGY SOURCES IMPORTANT TO SAFETY (ELECTRONIC, HYDRAULIC, PNEUMATIC) (VOLTAGES, CURRENTS, PRESSURES)	INSTALLED RANGE:	ALARM INDICATION FOR THE LEVEL OF THE NITROGEN STORAGE TANK WHICH SUPPLIES NITROGEN TO THE CAD SUPPLY VALVES IS PROVIDED IN THE MAIN CONTROL ROOM. SEE NOTE 1.
REQUIRED RANGE:	PLANT SPECIFIC	ENVIRONMENTAL QUALIFICATION:	YES
CATEGORY:	2	SEISMIC QUALIFICATION:	NA
PURPOSE:	TO MONITOR SYSTEM STATUS	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	2 LEVEL SWITCHES AND ASSOCIATED ALARMS
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		LIS-6530A, B	LIQUID NITROGEN STORAGE BUILDING
		POWER SUPPLY:	STATION BATTERIES FOR THE ANNUNCIATORS
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

NOTES:

- 1) IN ADDITION TO THE TANK LEVEL ALARM, THERE IS FLOW INDICATION OF THE NITROGEN SUPPLY TO THE CAD SUPPLY VALVES. THIS INDICATION IS LOCATED IN THE MAIN CONTROL ROOM. LOCAL INDICATION OF NITROGEN STORAGE TANK PRESSURE IS ALSO AVAILABLE IN THE LIQUID NITROGEN STORAGE BUILDING. THE LIQUID NITROGEN STORAGE BUILDING IS ACCESSIBLE DURING AND FOLLOWING AN ACCIDENT.

VARIABLE NO. D25 - PART 7

(STATUS OF STANDBY PNEUMATIC SUPPLIES - INSTRUMENT AIR TO CONTAINMENT ATMOSPHERE DILUTION (CAD) VENT VALVES)

DESCRIPTION:	STATUS OF STANDBY POWER AND OTHER ENERGY SOURCES IMPORTANT TO SAFETY (ELECTRONIC, HYDRAULIC, PNEUMATIC) (VOLTAGES, CURRENTS, PRESSURES)	INSTALLED RANGE: NO INSTRUMENTATION EXISTS TO MONITOR THE STATUS OF THE AIR SUPPLY TO THE FOLLOWING CAD VENT VALVES: AO-2514 (3514), AO-2513 (3513), CV-4954 (5954), AO-2509 (3509), AO-2510 (3510), CV-4957 (5957).
REQUIRED RANGE:	PLANT SPECIFIC	ENVIRONMENTAL QUALIFICATION:
CATEGORY:	2	SEISMIC QUALIFICATION:
PURPOSE:	TO MONITOR SYSTEM STATUS	QUALITY ASSURANCE:
		REDUNDANCY:
		<u>SENSOR(S):</u> <u>LOCATION:</u>
		POWER SUPPLY:
		LOCATION OF DISPLAY:

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

A MODIFICATION WILL BE INITIATED TO MONITOR THE STATUS OF THE AIR SUPPLY TO THE FOLLOWING CAD VENT VALVES: AO-2514 (3514), AO-2513 (3513), CV-4954 (5954), AO-2509 (3509), AO-2510 (3510), AND CV-4957 (5957).

SCHEDULE FOR UPGRADE:

BY THE END OF THE SECOND REFUELING OUTAGE FOR EACH UNIT FOLLOWING THE SPRING 1984 UNIT 2 REFUELING OUTAGE.

VARIABLE NO. D25 - PART 8
(STATUS OF PNEUMATIC SUPPLIES - BATTERY ROOM DAMPER AIR SUPPLY)

DESCRIPTION: STATUS OF STANDBY POWER AND OTHER ENERGY SOURCES INSTALLED RANGE: NO INSTRUMENTATION INSTALLED.
IMPORTANT TO SAFETY (ELECTRONIC, HYDRAULIC, SEE EXCEPTION.
PNEUMATIC) (VOLTAGES, CURRENTS, PRESSURES)

REQUIRED RANGE: PLANT SPECIFIC ENVIRONMENTAL QUALIFICATION:

CATEGORY: 2 SEISMIC QUALIFICATION:

PURPOSE: TO MONITOR SYSTEM STATUS QUALITY ASSURANCE:

REDUNDANCY:

SENSOR(S): LOCATION:

POWER SUPPLY:

LOCATION OF DISPLAY:

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NO ALARMS OR OTHER CONTROL ROOM INDICATION IS NEEDED DUE TO THE MINIMUM NUMBER OF DAMPER OPERATIONS REQUIRED;
THE LARGE NUMBER OF OPERATIONS PROVIDED BY THE BOTTLED AIR SYSTEM; AND THE VISIBILITY AND ACCESSIBILITY
OF THE BOTTLES FOR MONITORING. THE BOTTLES HAVE A LOCALLY MOUNTED PRESSURE GAGE. THE AREA IN WHICH THE GAGE IS LOCATED IS
ACCESSIBLE DURING AND FOLLOWING AN ACCIDENT.

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. D25 - PART 9

(STATUS OF STANDBY PNEUMATIC SUPPLIES - INSTRUMENT AIR TO THE MAIN STEAM ISOLATION VALVES (MSIV'S))

DESCRIPTION:	STATUS OF STANDBY POWER AND OTHER ENERGY SOURCES IMPORTANT TO SAFETY (ELECTRONIC, HYDRAULIC, PNEUMATIC) (VOLTAGES, CURRENTS, PRESSURES)	INSTALLED RANGE:	FOR THE INBOARD MSIV'S: PRESSURE SWITCHES ARE AVAILABLE WHICH MONITOR THE INSTRUMENT NITROGEN RECEIVER TANKS AND ACTUATE AN ALARM IN THE MAIN CONTROL ROOM. FOR THE OUTBOARD MSIV'S: PRESSURE INDICATORS (RANGE 0 TO 160 PSIG) ARE PROVIDED IN THE MAIN CONTROL ROOM WHICH MONITOR THE INSTRUMENT AIR SUPPLY TO THE VALVES.
REQUIRED RANGE:	PLANT SPECIFIC	ENVIRONMENTAL QUALIFICATION:	FOR THE INBOARD MSIV'S: NO, SEE EXCEPTION FOR THE OUTBOARD MSIV'S: YES
CATEGORY:	2	SEISMIC QUALIFICATION:	NA
PURPOSE:	TO MONITOR SYSTEM STATUS	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	FOR THE INBOARD MSIV'S: ONE PRESSURE SWITCH ON EACH INSTRUMENT NITROGEN RECEIVER TANK FOR THE OUTBOARD MSIV'S: ONE PRESSURE INDICATOR FOR EACH OF 3 AIR COMPRESSORS
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		FOR THE INBOARD MSIV'S: PS-4230 (5230) A, B	REACTOR BUILDING
		FOR THE OUTBOARD MSIV'S: PT-2429 (3429) A, B, C	TURBINE BUILDING
		POWER SUPPLY:	STATION BATTERIES FOR THE ALARMS; ONSITE FOR THE OUTBOARD MSIV AIR SUPPLY PRESSURE INSTRUMENTATION
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATOR GUIDE 1.97 AND JUSTIFICATION:

EACH MAIN STEAM LINE IS PROVIDED WITH REDUNDANT ISOLATION VALVES AND EACH ISOLATION VALVE IS PROVIDED WITH DIVERSE MEANS OF CLOSURE (I.E., SPRINGS AND AIR PRESSURE). EACH MSIV IS PROVIDED WITH A LOCAL PNEUMATIC ACCUMULATOR. LOSS OF SUPPLY LINE AIR PRESSURE INITIATES CLOSURE OF THE OUTBOARD MSIV'S. IT IS NOT NECESSARY TO ENVIRONMENTALLY QUALIFY THE PRESSURE INSTRUMENTATION BECAUSE OF THE INTENDED USE, THE DIVERSE POWER SOURCE, AND THE SHORT DURATION OF THEIR FUNCTION (I.E. ONLY FOR CONTAINMENT ISOLATION DURING THE FIRST PART OF THE ACCIDENT).

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MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. D25 - PART 10
(STATUS OF PNEUMATIC SUPPLIES - EMERGENCY DIESEL GENERATORS AIR START SUPPLY)

DESCRIPTION:	STATUS OF STANDBY POWER AND OTHER ENERGY SOURCES IMPORTANT TO SAFETY (ELECTRONIC, HYDRAULIC, PNEUMATIC) (VOLTAGES, CURRENTS, PRESSURES)	INSTALLED RANGE:	EACH EMERGENCY DIESEL GENERATOR IS PROVIDED WITH 2 AIR RECEIVERS. EACH RECEIVER IS PROVIDED WITH A PRESSURE SWITCH. THE PRESSURE SWITCH PROVIDES AN ALARM TO A LOCAL ANNUNCIATOR PANEL WHICH ACTUATES A COMMON TROUBLE ALARM IN THE MAIN CONTROL ROOM. SEE NOTE 1.
REQUIRED RANGE:	PLANT SPECIFIC	ENVIRONMENTAL QUALIFICATION:	YES
CATEGORY:	2	SEISMIC QUALIFICATION:	NA
PURPOSE:	TO MONITOR SYSTEM STATUS	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	PRESSURE SWITCH AND A LOCAL PRESSURE INDICATOR FOR EACH AIR RECEIVER
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		PSL-0615, A, B, C, D	DIESEL GENERATOR BUILDING
		PSL-0616, A, B, C, D	DIESEL GENERATOR BUILDING
		POWER SUPPLY:	STATION BATTERIES FOR THE LOCAL AND MAIN CONTROL ROOM ANNUNCIATORS
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM AND LOCALLY IN THE DIESEL GENERATOR BUILDING

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

NOTES:

1) IN ADDITION TO THE PRESSURE SWITCHES, EACH RECEIVER IS PROVIDED WITH A LOCAL PRESSURE INDICATOR. THE INDICATOR IS LOCATED IN THE

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DIESEL GENERATOR BUILDING WHICH IS ACCESSIBLE DURING AND FOLLOWING AN ACCIDENT.

VARIABLE NO. D26

DESCRIPTION:	TURBINE BYPASS VALVE POSITION	INSTALLED RANGE:	1) OPEN/CLOSE INDICATING LAMPS AND 0-100% INDICATION FOR EACH VALVE 2) 0-100% OF TOTAL VALVES OPEN (RECORDER)
REQUIRED RANGE:	NA	ENVIRONMENTAL QUALIFICATION:	NA
CATEGORY:	5	SEISMIC QUALIFICATION:	NA
PURPOSE:	TO MONITOR OPERATION	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	1) INDICATING LAMPS AND PERCENT METERS FOR EACH VALVE 2) RECORDER TO INDICATE % OPEN FOR ALL 9 VALVES
		<u>SENSOR(S):</u> POSITION SWITCHES AND POSITION TRANSDUCERS ON EACH BYPASS VALVE	<u>LOCATION:</u> TURBINE BUILDING
		POWER SUPPLY:	1) STATION BATTERIES FOR THE INDICATING LAMPS 2) UNINTERRUPTIBLE POWER (ONSITE SOURCE BACKED BY STATION BATTERIES) FOR THE PERCENT METERS 3) ONSITE SOURCE FOR THE RECORDER

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. D27

DESCRIPTION:	CONDENSER HOTWELL LEVEL	INSTALLED RANGE:	0-32"
REQUIRED RANGE:	NA	ENVIRONMENTAL QUALIFICATION:	NA
CATEGORY:	3	SEISMIC QUALIFICATION:	NA
PURPOSE:	TO MONITOR OPERATION	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	1 CHANNEL PER CONDENSER
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		LT-2085(3085)A,B,C	TURBINE BUILDING
		POWER SUPPLY:	ONSITE POWER
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. D28

DESCRIPTION:	CONDENSER VACUUM	INSTALLED RANGE:	0-30 "HG VACUUM
REQUIRED RANGE:	NA	ENVIRONMENTAL QUALIFICATION:	NA
CATEGORY:	3	SEISMIC QUALIFICATION:	NA
PURPOSE:	TO MONITOR OPERATION	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	1 CHANNEL PER CONDENSER
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		PT-2154(3154)A,B,C	TURBINE BUILDING
		POWER SUPPLY:	ONSITE POWER
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. D29

DESCRIPTION:	CONDENSER COOLING WATER FLOW. AT PEACH BOTTOM, THIS IS THE CIRCULATING WATER PUMP DISCHARGE PRESSURE.	INSTALLED RANGE:	0-30 PSIG
REQUIRED RANGE:	NA	ENVIRONMENTAL QUALIFICATION:	NA
CATEGORY:	3	SEISMIC QUALIFICATION:	NA
PURPOSE:	TO MONITOR OPERATION	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	1 CHANNEL PER CIRCULATING WATER PUMP
		<u>SENSOR(S):</u> PT-2263(3263)A,B,C	<u>LOCATION:</u> PUMP STRUCTURE
		POWER SUPPLY:	ONSITE POWER
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. D30

DESCRIPTION: PRIMARY LOOP RECIRCULATION FLOW
REQUIRED RANGE: NA
CATEGORY: 3
PURPOSE: TO MONITOR OPERATION

INSTALLED RANGE: 6-70,000 GPM
ENVIRONMENTAL QUALIFICATION: NA
SEISMIC QUALIFICATION: NA
QUALITY ASSURANCE: COMMERCIAL GRADE
REDUNDANCY: 2 CHANNELS PER RECIRC LOOP
SENSOR(S):
FT-2(3)-2-110A,B,C,D
LOCATION:
REACTOR BUILDING
POWER SUPPLY: ONSITE POWER
LOCATION OF DISPLAY: MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. E1

(ALSO SEE VARIABLE C5)

DESCRIPTION:	PRIMARY CONFINEMENT AREA RADIATION -- HIGH RANGE	INSTALLED RANGE:	1 R/HR TO 1 X E+08 R/HR
REQUIRED RANGE:	1 R/HR TO 1 X E+07 R/HR	ENVIRONMENTAL QUALIFICATION:	YES
CATEGORY:	1	SEISMIC QUALIFICATION:	YES
PURPOSE:	DETECTION OF SIGNIFICANT RELEASES; RELEASE ASSESSMENT; LONG-TERM SURVEILLANCE; EMERGENCY PLAN ACTUATION	QUALITY ASSURANCE:	FULL Q.A. PLAN
		REDUNDANCY:	4 CHANNELS (2 DIVISIONS)
		<u>SENSOR(S):</u> RE-8103(9103)A,B,C,D	<u>LOCATION:</u> DRYWELL
		POWER SUPPLY:	CLASS 1E
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. E2

(ALSO SEE VARIABLE E3)

DESCRIPTION:	REACTOR BUILDING OR SECONDARY CONTAINMENT AREA RADIATION	INSTALLED RANGE:	1 SENSOR: 1.0 TO 1 X E+06 MR/HR BALANCE OF SENSORS: 0.01 TO 1 X E+04 MR/HR
REQUIRED RANGE:	1 X E-01 R/HR TO 1 X E+04 R/HR FOR MARK I AND II CONTAINMENTS. (PEACH BOTTOM HAS A MARK I CONTAINMENT).	ENVIRONMENTAL QUALIFICATION:	NO
CATEGORY:	2	SEISMIC QUALIFICATION:	NA
PURPOSE:	DETECTION OF SIGNIFICANT RELEASES; RELEASE ASSESSMENT; LONG-TERM SURVEILLANCE	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	SINGLE CHANNEL SENSORS LOCATED THROUGHOUT THE REACTOR BUILDING
	<u>SENSOR(S):</u>	<u>LOCATION:</u>	<u>BUILDING</u>
	RE-2(3)-18-30AA	REACTOR BUILDING SUMP AREA	REACTOR BUILDING
	RE-2(3)-18-30AB	REACTOR BUILDING TORUS COMPARTMENT	REACTOR BUILDING
	RE-2(3)-18-30AC	REACTOR BUILDING HPCI PUMP RM	REACTOR BUILDING
	RE-2(3)-18-30AD	REACTOR BUILDING RCIC PUMP RM	REACTOR BUILDING
	RE-2(3)-18-30AE	RHR PUMP RM "D"	REACTOR BUILDING
	RE-2(3)-18-30AF	RHR PUMP RM "A"	REACTOR BUILDING
	RE-2(3)-18-30AG	CORE SPRAY PUMP RM "B" (UNIT 3: RM 'A')	REACTOR BUILDING
	RE-2(3)-18-30AJ	RECIRC. PUMP INST. RACK AREA	REACTOR BUILDING
	RE-2(3)-18-30AK	STEAM FLOW INST. RACK AREA	REACTOR BUILDING
	RE-2(3)-18-30AL	COOLING WATER PUMP AREA	REACTOR BUILDING
	RE-2(3)-18-30AR	R.B. EQUIP. ACCESS LOCK TIP CONTROL AREA	REACTOR BUILDING
	RE-2(3)-18-30AS	R.B. PERS. ACCESS (SOUTH) (UNIT 3: NORTH)	REACTOR BUILDING
	RE-2(3)-18-30AT	R.B. PERS. ACCESS (NORTH) (UNIT 3: SOUTH)	REACTOR BUILDING
	RE-2(3)-18-30AU	T.I.P. WITHDRAWAL AREA	REACTOR BUILDING
	RE-2(3)-18-30AX	R.B. OPERATING AREA	REACTOR BUILDING
	RE-2(3)-18-30AY	R.B. ACCESS	REACTOR BUILDING
	RE-2(3)-18-30BC	NEW FUEL STORAGE AREA INSIDE VAULT)	REACTOR BUILDING
	RE-2(3)-18-30BD	R.B. EXH. FANS	REACTOR BUILDING
	RE-2(3)-18-31C	STM SEP. POOL AREA	REACTOR BUILDING
	RE-2(3)-18-30BE	REACTOR REFUEL SLOT AREA	REACTOR BUILDING
	RE-2(3)-18-30BF	FUEL POOL AREA	REACTOR BUILDING
	RE-2(3)-18-30BG	REFUELING BRIDGE	REACTOR BUILDING
	RE-0-18-30P	SOURCE STORAGE AND CALIBRATION ROOM (UNIT 2)	REACTOR BUILDING

POWER SUPPLY:

ONSITE

LOCATION OF DISPLAY:

MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

THE PURPOSE FOR MONITORING SECONDARY CONTAINMENT RADIATION AS LISTED IN REGULATORY GUIDE 1.97 IS FOR "DETECTION OF SIGNIFICANT RELEASES; RELEASE ASSESSMENT; LONG-TERM SURVEILLANCE." THE USE OF LOCAL RADIATION EXPOSURE RATE MONITORS TO DETECT BREACH OR LEAKAGE THROUGH PRIMARY CONTAINMENT PENETRATIONS IS IMPRACTICAL AND UNNECESSARY. IN GENERAL, RADIATION EXPOSURE RATE IN THE SECONDARY CONTAINMENT WILL BE LARGELY A FUNCTION OF RADIOACTIVITY IN PRIMARY CONTAINMENT AND IN THE FLUIDS FLOWING IN ECCS PIPING, WHICH WILL CAUSE DIRECT RADIATION SHINE ON THE AREA MONITORS. ALSO, BECAUSE OF THE AMOUNT OF PIPING AND THE NUMBER OF ELECTRICAL PENETRATIONS AND HATCHES AND THEIR WIDELY SCATTERED LOCATIONS, LOCAL RADIATION EXPOSURE RATE MONITORS COULD GIVE AMBIGUOUS INDICATIONS. THE PROPER WAY TO DETECT BREACH OF CONTAINMENT IS BY USING THE PLANT NOBLE GAS EFFLUENT MONITORS.

THEREFORE, USING RADIATION EXPOSURE RATE MONITORS TO DETECT PRIMARY CONTAINMENT BREACH IS NEITHER FEASIBLE NOR NECESSARY. OTHER MEANS OF BREACH DETECTION THAT ARE BETTER SUITED TO THIS FUNCTION (AS DESCRIBED ABOVE) ARE AVAILABLE.

IN CONSIDERATION OF THE ABOVE DISCUSSION, THE EXISTING CATEGORY 3 AREA RADIATION MONITORS ARE ADEQUATE.

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. E3
(ALSO SEE VARIABLE E2)

DESCRIPTION: RADIATION EXPOSURE RATE (INSIDE BUILDINGS OR AREAS WHERE ACCESS IS REQUIRED TO SERVICE EQUIPMENT IMPORTANT TO SAFETY)

REQUIRED RANGE: 1 X E-01 R/HR TO 1 X E+04 R/HR

CATEGORY: 3

PURPOSE: DETECTION OF SIGNIFICANT RELEASES; RELEASE ASSESSMENT; LONG-TERM SURVEILLANCE

INSTALLED RANGE: THE FOLLOWING AREAS HAVE BEEN IDENTIFIED AS REQUIRING CONTINUOUS OCCUPANCY FOLLOWING A LOCA:

- A) MAIN CONTROL ROOM
- B) TECHNICAL SUPPORT CENTER
- C) EMERGENCY OPERATIONS FACILITY
- D) BACKUP COUNTING ROOM

THE FOLLOWING AREAS HAVE BEEN IDENTIFIED AS REQUIRING INFREQUENT ACCESS:

- A) HEALTH PHYSICS - OPERATIONS SUPPORT CENTER
- B) OPERATIONS SUPPORT CENTER
- C) CHEM LAB/COUNTING ROOM
- D) RADWASTE CONTROL ROOM
- E) M.G. SET ROOM
- F) CABLE SPREADING ROOM
- G) DIESEL GENERATOR BUILDING
- H) CONTAINMENT ATMOSPHERE DILUTION NITROGEN SUPPLY BUILDING
- I) VENT STACK EFFLUENT RADIATION MON FOR AREA
- J) SPENT FUEL POOL AREA.

THE RADIATION EXPOSURE RATE IN THESE AREAS, AS WELL AS THE TRAVEL ROUTES FROM ONE AREA TO ANOTHER WILL BE MONITORED BY PORTABLE RADIATION MONITORING INSTRUMENTS. APPROXIMATELY 28 MONITORS HAVE BEEN ALLOCATED FOR THIS PURPOSE. THE INSTRUMENTS HAVE VARIOUS RANGES WHICH ENVELOPE THE REQUIRED RANGE.

IN ADDITION, THE MAIN CONTROL ROOM, THE VENT STACK EFFLUENT RADIATION MONITOR AREA, AND THE SPENT FUEL POOL AREA, HAVE A PERMANENTLY MOUNTED AREA RADIATION MONITOR (RANGE 0.01 TO 1 X E+04 MR/HR) WHICH CONTINUOUSLY INDICATES THE RADIATION EXPOSURE RATE IN THESE AREAS. THESE MONITORS MEET THE REQUIREMENTS FOR CATEGORY 3 INSTRUMENTS.

ENVIRONMENTAL QUALIFICATION: NA

SEISMIC QUALIFICATION: NA

QUALITY ASSURANCE: COMMERCIAL GRADE

REDUNDANCY: 28 PORTABLE RADIATION MONITORS, PLUS 3 PERMANENT AREA RADIATION MONITORS

SENSOR(S): NA

LOCATION: NA

POWER SUPPLY:

BATTERY FOR PORTABLE MONITOR;
ONSITE FOR THE AREA RADIATION
MONITORS

LOCATION OF DISPLAY:

ON THE INSTRUMENT FOR THE
PORTABLE MONITORS; IN THE MAIN
CONTROL ROOM FOR THE AREA
RADIATION MONITORS

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. E4 - PART 1
(NOBLE GASES AND VENT FLOW RATE)

DESCRIPTION:	DRYWELL PURGE, STANDBY GAS TREATMENT SYSTEM PURGE (FOR MARK I AND II PLANTS) AND SECONDARY CONTAINMENT PURGE (FOR MARK III PLANTS)	INSTALLED RANGE:	NA TO PEACH BOTTOM
REQUIRED RANGE:	1 X E-06 MICRO CI/CC TO 1 X E+05 MICRO CI/CC. 0 TO 110 % VENT DESIGN FLOW. (NOT NEEDED IF EFFLUENT DISCHARGES THROUGH COMMON PLANT VENT)	ENVIRONMENTAL QUALIFICATION:	
CATEGORY:	2	SEISMIC QUALIFICATION:	
PURPOSE:	DETECTION OF SIGNIFICANT RELEASES; RELEASE ASSESSMENT.	QUALITY ASSURANCE:	
		REDUNDANCY:	
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		POWER SUPPLY:	
		LOCATION OF DISPLAY:	

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

THE DRYWELL PURGE AND STANDBY GAS TREATMENT SYSTEM PURGE DISCHARGE THROUGH THE OFF GAS STACK. SEE VARIABLE E4, PART 6 AND PART 9
FOR THE DESCRIPTION OF THE NOBLE GAS AND FLOW MONITORING FOR THE OFF GAS STACK.

MODIFICATIONS PROPOSED:

SCHEDULE FOR UPGRADE:

VARIABLE NO. E4 - PART 2
(NOBLE GASES AND VENT FLOW RATE)

DESCRIPTION:	SECONDARY CONTAINMENT PURGE (FOR MARK I, II, AND III PLANTS)	INSTALLED RANGE:	NA TO PEACH BOTTOM
REQUIRED RANGE:	1 X E-06 MICRO CI/CC TO 1 X E+04 MICRO CI/CC. 0 TO 110 % DESIGN FLOW (NOT NEEDED IF EFFLUENT DISCHARGES THROUGH COMMON PLANT VENT)	ENVIRONMENTAL QUALIFICATION:	
CATEGORY:	2	SEISMIC QUALIFICATION:	
PURPOSE:	DETECTION OF SIGNIFICANT RELEASES; RELEASE ASSESSMENT.	QUALITY ASSURANCE:	
		REDUNDANCY:	
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		POWER SUPPLY:	
		LOCATION OF DISPLAY:	

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

THE SECONDARY CONTAINMENT PURGE DISCHARGES THROUGH THE UNIT VENT STACK UNDER NORMAL CONDITIONS AND THE OFF GAS STACK DURING ACCIDENT CONDITIONS. SEE VARIABLE E4, PART 5 AND PART 7 FOR THE NOBLE GAS AND FLOW MONITORING FOR THE UNIT VENT STACK. SEE VARIABLE E4, PART 6 AND PART 8 FOR THE NOBLE GAS AND FLOW MONITORING FOR THE OFF GAS STACK.

MODIFICATIONS PROPOSED:

SCHEDULE FOR UPGRADE:

VARIABLE NO. E4 - PART 3
(NOBLE GASES AND VENT FLOW RATE)

DESCRIPTION:	SECONDARY CONTAINMENT (REACTOR SHIELD BUILDING ANNULUS, IF IN DESIGN)	INSTALLED RANGE:	NA TO PEACH BOTTOM
REQUIRED RANGE:	1 X E-06 MICRO CI/CC TO 1 X E+04 MICRO CI/CC. 0 TO 110 % VENT DESIGN FLOW. (NOT NEEDED IF EFFLUENT DISCHARGES THROUGH COMMON PLANT VENT).	ENVIRONMENTAL QUALIFICATION:	
CATEGORY:	2	SEISMIC QUALIFICATION:	
PURPOSE:	DETECTION OF SIGNIFICANT RELEASES; RELEASE ASSESSMENT.	QUALITY ASSURANCE:	
		REDUNDANCY:	
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		POWER SUPPLY:	
		LOCATION OF DISPLAY:	

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

PEACH BOTTOM DOES NOT HAVE A REACTOR SHIELD BUILDING ANNULUS.

MODIFICATIONS PROPOSED:

SCHEDULE FOR UPGRADE:

VARIABLE NO. E4 - PART 4
(NOBLE GASES AND VENT FLOW RATE)

DESCRIPTION:	AUXILLARY BUILDING (INCLUDING BUILDING CONTAINING PRIMARY SYSTEM GASES E.G. WASTE GAS DECAY TANK)	INSTALLED RANGE:	NA TO PEACH BOTTOM
REQUIRED RANGE:	1 X E-06 MICRO CI/CC TO 1 X E+03 MICRO CI/CC. 0 TO 110 % VENT DESIGN FLOW (NOT NEEDED IF EFFLUENT DISCHARGES THROUGH THE COMMON PLANT VENT).	ENVIRONMENTAL QUALIFICATION:	
CATEGORY:	2	SEISMIC QUALIFICATION:	
PURPOSE:	DETECTION OF SIGNIFICANT RELEASES; RELEASE ASSESSMENT; LONG TERM SURVEILLANCE.	QUALITY ASSURANCE:	
		REDUNDANCY:	
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		POWER SUPPLY:	
		LOCATION OF DISPLAY:	

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

ALL RELEASES FROM THE TURBINE BUILDING, RECOMBINER BUILDING, AND RADWASTE BUILDING DISCHARGE THROUGH THE UNIT VENT STACKS. SEE VARIABLE E4, PART 5 AND PART 7 FOR THE NOBLE GAS AND FLOW MONITORING FOR THE UNIT VENT STACKS.

MODIFICATIONS PROPOSED:

SCHEDULE FOR UPGRADE:

VARIABLE NO. E4 - PART 5
(NOBLE GASES AND VENT FLOW RATE)
(ALSO SEE VARIABLE C14)

DESCRIPTION:	COMMON PLANT VENT OR MULTIPURPOSE VENT DISCHARGING ANY OF THE ABOVE RELEASES. (UNIT VENT STACK RADIOACTIVITY - NOBLE GASES). SEE NOTE (1).	INSTALLED RANGE:	LOW RANGE: 1 X E-07 MICRO CI/CC TO 1.6 MICRO CI/CC HIGH RANGE: 1.4 X E-02 TO 1.4 X E+04 MICRO CI/CC
REQUIRED RANGE:	1 X E-06 MICRO CI/CC TO 1 X E+03 MICRO CI/CC SEE NOTE (2).	ENVIRONMENTAL QUALIFICATION:	NO
CATEGORY:	2	SEISMIC QUALIFICATION:	NA
PURPOSE:	DETECTION OF SIGNIFICANT RELEASES; RELEASE ASSESSMENT; LONG TERM SURVEILLANCE	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	2 CHANNELS FOR THE LOW RANGE 1 CHANNEL FOR THE HIGH RANGE
		<u>SENSOR(S):</u> RE-2979(3979)A,B RE-7127A (UNIT 2) RE-7127B (UNIT 3)	<u>LOCATION:</u> REACTOR BUILDING REACTOR BUILDING REACTOR BUILDING
		POWER SUPPLY:	ONSITE FOR LOW RANGE; ONSITE FOR HIGH RANGE SENSORS; OFFSITE FOR THE HIGH RANGE RECORDERS.
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

BY DESIGN, THE UNIT VENT STACKS ARE NOT A MAJOR RELEASE POINT DURING ACCIDENT CONDITIONS. THE PLANT IS DESIGNED TO ISOLATE THE REACTOR BUILDING ON A HIGH RADIATION SIGNAL AND PROCESS THE REACTOR BUILDING ATMOSPHERE THROUGH THE STANDBY GAS TREATMENT SYSTEM. THE RELEASE POINT FOR THE STANDBY GAS TREATMENT SYSTEM IS THROUGH THE OFF GAS STACK. THE OFF GAS STACK MONITORING EQUIPMENT MEETS THE R.G.1.97 REQUIREMENTS FOR CATEGORY 2 INSTRUMENTS. (SEE VARIABLE E4, PART 6 AND PART 8).

DURING AN ACCIDENT, THE REACTOR BUILDING ISOLATES; THE ONLY CONTRIBUTIONS TO THE UNIT VENT STACK RELEASE ARE THE TURBINE BUILDING, RECOMBINER BUILDING AND RADWASTE BUILDING. THE MAGNITUDE OF THESE RELEASES WILL BE MINIMAL COMPARED TO THE ACTIVITY RELEASED FROM THE OFF GAS STACK. IN ADDITION, SINCE THE TURBINE BUILDING, RECOMBINER BUILDING, AND RADWASTE BUILDING ARE ACCESSIBLE POST ACCIDENT, AIR SAMPLES OBTAINED BY USING PORTABLE SAMPLING EQUIPMENT CAN BE USED TO QUANTIFY THE ACTIVITY RELEASED.

BASED ON THE ABOVE DISCUSSION, THE EXISTING CATEGORY 3 INSTRUMENTATION IS ADEQUATE.

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

NOTES:

- 1) SEE VARIABLE E4, PART 7, FOR THE UNIT VENT STACK FLOW MONITORING INFORMATION.
- 2) THIS RANGE WAS SPECIFIED SINCE THE DRYWELL OR SGTS PURGE DOES NOT DISCHARGE THROUGH THE VENT STACKS FOR EACH UNIT.

VARIABLE NO. E4 - PART 6
(NOBLE GASES AND VENT FLOW RATE)
(ALSO SEE VARIABLE C13)

DESCRIPTION:	COMMON PLANT VENT OR MULTIPURPOSE VENT DISCHARGING ANY OF THE ABOVE RELEASES. (OFF-GAS STACK RADIOACTIVITY-NOBLE GASES.) SEE NOTE 1.	INSTALLED RANGE:	AT 20,000 CFM: THE LOW RANGE IS 1 X E-05 TO 5.0 MICRO CI/CC; THE HIGH RANGE IS 1.4 X E-02 TO 1.4 X E+04 MICRO CI/CC
REQUIRED RANGE:	1 X E-06 MICRO CI/CC TO 1 X E+04 MICRO CI/CC SEE NOTE 2.	ENVIRONMENTAL QUALIFICATION:	YES
CATEGORY:	2	SEISMIC QUALIFICATION:	NA
PURPOSE:	DETECTION OF SIGNIFICANT RELEASES;RELEASE ASSESSMENT;LONG TERM SURVEILLANCE	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	2 CHANNELS FOR THE LOW RANGE 1 CHANNEL FOR THE HIGH RANGE
		<u>SENSOR(S):</u> RT-0-17-30A,B RE-7127C	<u>LOCATION:</u> OFF-GAS STACK EQUIPMENT BUILDING OFF-GAS STACK EQUIPMENT BUILDING
		POWER SUPPLY:	A COMBINATION OF UNINTERRUPTIBLE POWER (ONSITE SOURCE BACKED BY STATION BATTERIES), ONSITE SOURCES AND STATION BATTERIES FOR THE LOW RANGE; A COMBINATION OF UNINTERRUPTIBLE POWER (ONSITE SOURCE BACKED BY STATION BATTERIES) AND ONSITE SOURCES FOR THE HIGH RANGE SENSORS. OFFSITE SOURCE FOR THE HIGH RANGE RECORDER.
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

THE LOW RANGE REQUIREMENT IS UNNECESSARILY LOW; THE NORMAL STATION BACKGROUND RADIATION (APPROXIMATELY 1 X E-05 MICRO CI/CC) IS GREATER THAN THE LOW RANGE SPECIFIED IN REGULATORY GUIDE 1.97. THE RANGES OF THE CURRENTLY INSTALLED DEVICES IS CONSIDERED SUFFICIENT FOR ACCIDENT MONITORING.

MODIFICATIONS PROPOSED:

NL NIE

SCHEDULE FOR UPGRADE:

NONE

NOTES:

- 1) SEE VARIABLE E4, PART 8, FOR THE OFF GAS STACK FLOW MONITORING INFORMATION.
- 2) THIS RANGE WAS CHOSEN SINCE THE DRYWELL AND SGTS PURGE DISCHARGE THROUGH THE OFF GAS STACK.

VARIABLE NO. E4 - PART 7
(NOBLE GASES AND VENT FLOW RATE)

DESCRIPTION:	COMMON PLANT VENT OR MULTIPURPOSE VENT DISCHARGING ANY OF THE ABOVE RELEASES. (UNIT VENT STACK FLOW). SEE NOTE (1).	INSTALLED RANGE:	0 TO 600 KCFM
REQUIRED RANGE:	0 - 110% DESIGN FLOW (AT PEACH BOTTOM THE MAXIMUM NORMAL FLOW IS 417 KCFM)	ENVIRONMENTAL QUALIFICATION:	NO
CATEGORY:	2	SEISMIC QUALIFICATION:	NA
PURPOSE:	DETECTION OF SIGNIFICANT RELEASES; RELEASE ASSESSMENT; LONG TERM SURVEILLANCE	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	2 CHANNELS
		<u>SENSOR(S):</u> FT-2508(3508)A,B	<u>LOCATION:</u> REACTOR BUILDING
		POWER SUPPLY:	ONSITE
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

BY DESIGN, THE UNIT VENT STACKS ARE NOT A MAJOR RELEASE POINT DURING ACCIDENT CONDITIONS. THE PLANT IS DESIGNED TO ISOLATE THE REACTOR BUILDING ON A HIGH RADIATION SIGNAL AND PROCESS THE REACTOR BUILDING ATMOSPHERE THROUGH THE STANDBY GAS TREATMENT SYSTEM. THE RELEASE POINT FOR THE STANDBY GAS TREATMENT SYSTEM IS THROUGH THE OFF GAS STACK. THE OFF GAS STACK MONITORING EQUIPMENT MEETS THE R.G.1.97 REQUIREMENTS FOR CATEGORY 2 INSTRUMENTS. (SEE VARIABLE E4, PART 6 AND PART 8).

DURING AN ACCIDENT, THE REACTOR BUILDING ISOLATES; THE ONLY CONTRIBUTIONS TO THE UNIT VENT STACK RELEASE ARE THE TURBINE BUILDING, RECOMBINER BUILDING AND RADWASTE BUILDING. THE MAGNITUDE OF THESE RELEASES WILL BE MINIMAL COMPARED TO THE ACTIVITY RELEASED FROM THE OFF GAS STACK. IN ADDITION, SINCE THE TURBINE BUILDING, RECOMBINER BUILDING, AND RADWASTE BUILDING ARE ACCESSIBLE POST ACCIDENT, AIR SAMPLES OBTAINED BY USING PORTABLE SAMPLING EQUIPMENT CAN BE USED TO QUANTIFY THE ACTIVITY RELEASED.

BASED ON THE ABOVE DISCUSSION, THE EXISTING CATEGORY 3 INSTRUMENTATION IS ADEQUATE.

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

NOTES:

- 1) SEE VARIABLE E4, PART 5, FOR THE UNIT VENT STACK RADIOACTIVITY (NOBLE GAS) MONITORING INFORMATION.

VARIABLE NO. E4 - PART 6
(NOBLE GASES AND VENT FLOW RATE)

DESCRIPTION:	COMMON PLANT VENT OR MULTIPURPOSE VENT DISCHARGING ANY OF THE ABOVE RELEASES. (OFF-GAS STACK FLOW). SEE NOTE (1).	INSTALLED RANGE:	0 TO 40 KCFM
REQUIRED RANGE:	0 - 110% DESIGN FLOW (AT PEACH BOTTOM, THE MAXIMUM NORMAL FLOW IS 19 KCFM)	ENVIRONMENTAL QUALIFICATION:	YES
CATEGORY:	2	SEISMIC QUALIFICATION:	NA
PURPOSE:	DETECTION OF SIGNIFICANT RELEASES; RELEASE ASSESSMENT; LONG TERM SURVEILLANCE	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	2 CHANNELS
		SENSOR(S):	LOCATION:
		FT-0470A,B AND	OFF-GAS STACK
		FT-6534A,B	EQUIPMENT BUILDING
		POWER SUPPLY:	ONSITE
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

NOTES:

1) SEE VARIABLE E4, PART 6, FOR THE OFF GAS STACK RADIOACTIVITY (NOBLE GAS) MONITORING INFORMATION.

VARIABLE NO. E6

DESCRIPTION:	AIRBORNE RADIOHALOGENS AND PARTICULATES (PORTABLE SAMPLING WITH ON-SITE ANALYSIS CAPABILITY)	INSTALLED RANGE:	REQUIREMENT MET WITH PROPER SAMPLING VOLUME AND COUNTING TIME
REQUIRED RANGE:	1 X E-09 MICRO CI/CC TO 1 X E-03 MICRO CI/CC	ENVIRONMENTAL QUALIFICATION:	NA
CATEGORY:	3	SEISMIC QUALIFICATION:	NA
PURPOSE:	RELEASE ASSESSMENT; ANALYSIS	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	NA
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		NA	NA
		POWER SUPPLY:	BATTERY FOR PORTABLE SAMPLERS
		LOCATION OF DISPLAY:	ANALYSIS IN THE ON-SITE LAB

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. E7

DESCRIPTION:	PLANT AND ENVIRONS RADIATION (PORTABLE INSTRUMENTATION)	INSTALLED RANGE:	0 TO 2 X E+04 R/HR, GAMMA AND BETA RADIATIONS.
REQUIRED RANGE:	1 X E-03 R/HR TO 1 X E+04 R/HR, PHOTONS 1 X E-03 RADS/HR TO 1 X E+04 RADS/HR, BETA RADIATIONS AND LOW-ENERGY PHOTONS	ENVIRONMENTAL QUALIFICATION:	NA
CATEGORY:	3	SEISMIC QUALIFICATION:	NA
PURPOSE:	RELEASE ASSESSMENT; ANALYSIS	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	NA
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		NA	NA
		POWER SUPPLY:	BATTERY
		LOCATION OF DISPLAY:	ON THE INSTRUMENT

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. E8

DESCRIPTION:	PLANT AND ENVIRONS RADIOACTIVITY (PORTABLE INSTRUMENTATION)	INSTALLED RANGE:	REQUIREMENT MET WITH SINGLE CHANNEL ANALYZER- 2 ADJUSTABLE CHANNELS
REQUIRED RANGE:	ISOTOPIC ANALYSIS	ENVIRONMENTAL QUALIFICATION:	NA
CATEGORY:	3	SEISMIC QUALIFICATION:	NA
PURPOSE:	RELEASE ASSESSMENT; ANALYSIS	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	NA
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		NA	NA
		POWER SUPPLY:	BATTERY PACK OR A.C.
		LOCATION OF DISPLAY:	ON THE INSTRUMENT

EXCEPTIONS TO REGULATORY GUIDE .97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. E9

DESCRIPTION:	WIND DIRECTION	INSTALLED RANGE:	RANGE: 0 TO 540 DEGREES
REQUIRED RANGE:	0 TO 360 DEGREES (+/- 5 DEGREES ACCURACY WITH A DEFLECTION OF 10 DEGREES). STARTING SPEED LESS THAN 0.4 MPS (1.0 MPH). DAMPING RATIO GREATER THAN OR EQUAL TO 0.4, DELAY DISTANCE LESS THAN OR EQUAL TO 2 METERS.		ACCURACY: ROOT-SUM-SQUARE ACCURACY IS +/- 4.45 DEGREES
CATEGORY:	3		STARTING SPEED: 0.5 MPH
PURPOSE:	RELEASE ASSESSMENT		DAMPING RATIO: 0.4 AT 10 DEGREES DEFLECTION
			DELAY DISTANCE: 3.7 FEET
		ENVIRONMENTAL QUALIFICATION:	NA
		SEISMIC QUALIFICATION:	NA
		QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	1 WIND VANE AT ELEVATION 75' 1 WIND VANE AT ELEVATION 320'
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		WIND VANE AT ELEVATION 75' (THIS IS THE HEIGHT OF THE UNIT VENT STACK RELEASE)	METEOROLOGICAL TOWER 2
		WIND VANE AT ELEVATION 320' (THIS IS THE HEIGHT OF THE OFF GAS STACK RELEASE POINT)	METEOROLOGICAL TOWER 2
		POWER SUPPLY:	A COMBINATION OF ONSITE AND OFFSITE SOURCES
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

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SCHEDULE FOR UPGRADE:

ONE

VARIABLE NO. E10

DESCRIPTION:	WIND SPEED	INSTALLED RANGE:	RANGE: 0 TO 100 MPH
REQUIRED RANGE:	0 TO 22 MPS (50 MPH). +/- 0.2 MPS (0.5 MPH) ACCURACY FOR SPEEDS LESS THAN 2 MPS (5 MPH), 10 % FOR SPEEDS IN EXCESS OF 2 MPS (5 MPH) WITH A STARTING THRESHOLD OF LESS THAN 0.4 MPS (1.0 MPH) AND A DISTANCE CONSTANT NOT TO EXCEED 2 METERS.		ACCURACY: ROOT-SUM-SQUARE ACCURACY IS +/- 0.442 MPH FOR THE DIGITAL SYSTEM AND +/- 0.636 MPH FOR THE ANALOG SYSTEM. STARTING THRESHOLD: 0.5 MPH DISTANCE CONSTANT: 5.0 FEET
CATEGORY:	3		
PURPOSE:	RELEASE ASSESSMENT	ENVIRONMENTAL QUALIFICATION:	NA
		SEISMIC QUALIFICATION:	NA
		QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	1 ANEMOMETER AT ELEVATION 75' 1 ANEMOMETER AT ELEVATION 320'
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		ANEMOMETER AT ELEVATION 75' (75' IS THE HEIGHT OF THE UNIT VENT STACK RELEASE)	METEOROLOGICAL TOWER 2
		ANEMOMETER AT ELEVATION 320' (320' IS THE HEIGHT OF THE OFF GAS STACK RELEASE)	METEOROLOGICAL TOWER 2
		POWER SUPPLY:	A COMBINATION OF ONSITE AND OFFSITE SOURCES
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

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SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. E11

DESCRIPTION:	ESTIMATION OF ATMOSPHERIC STABILITY	INSTALLED RANGE:	RANGE: -10 DEGREES F TO 20 DEGREES F
REQUIRED RANGE:	BASED ON VERTICAL TEMPERATURE DIFFERENCE FROM PRIMARY METEOROLOGICAL SYSTEMS, -5 DEGREES C TO 10 DEGREES C (-9 DEGREES F TO 18 DEGREES F) AND +/- 0.15 DEGREES C ACCURACY PER 50 METER INTERVALS (+/- 0.3 DEGREES F ACCURACY PER 164-FOOT INTERVALS) OR ANALOGOUS RANGE FOR ALTERNATIVE STABILITY ESTIMATES.		ACCURACY: CONVERTED TO 164' INTERVALS, THE ROOT-SUM-SQUARE ACCURACY OF DELTA-T (316'-33') IS +/- 0.11 DEGREES F. CONVERTED TO 164' INTERVALS, THE ROOT-SUM-SQUARE ACCURACY OF DELTA-T (146'-33') IS +/- 0.27 DEGREES F.
CATEGORY:	3	ENVIRONMENTAL QUALIFICATION:	NA
PURPOSE:	RELEASE ASSESSMENT	SEISMIC QUALIFICATION:	NA
		QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	DELTA-T MEASUREMENT (316'-33') DELTA-T MEASUREMENT (146'-33')
		<u>SENSOR(S):</u>	<u>LOCATION:</u>
		DELTA-T MEASUREMENT (316'-33')	METEOROLOGICAL TOWER 2
		DELTA-T MEASUREMENT (146'-33')	METEOROLOGICAL TOWER 2
		POWER SUPPLY:	A COMBINATION OF ONSITE AND OFFSITE SOURCES
		LOCATION OF DISPLAY:	MAIN CONTROL ROOM

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

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SCHEDULE FOR UPGRADE:

NONE

VARIABLE NO. E12

DESCRIPTION:	PRIMARY COOLANT AND SUMP (GRAB SAMPLE)	INSTALLED RANGE:
REQUIRED RANGE:	1)GROSS ACTIVITY: 1 MICRO CI/ML TO 10 CI/ML 2)GAMMA SPECTRUM: (ISOTOPIC ANALYSIS) 3)BORON CONTENT: 0 TO 1000 PPM 4)CHLORIDE CONTENT: 0 TO 20 PPM 5)DISSOLVED HYDROGEN OR TOTAL GAS: 0 TO 2000 CC (STP)/KG 6)DISSOLVED OXYGEN: 0 TO 20 PPM 7)PH: 1 TO 13	(SEE NOTE 1) 1) GROSS ACTIVITY: 1 MICRO CI/ML TO 10 CI/ML 2) GAMMA SPECTRUM: ISOTOPIC ANALYSIS 3) BORON CONTENT: 50-1100 PPM 4) CHLORIDE CONTENT: A) ONSITE: SCOPING ANALYSIS B) OFFSITE: 0-20 PPM 5) DISSOLVED HYDROGEN OR TOTAL GAS: 0-2000 CC/KG 6) DISSOLVED OXYGEN: 0-20 PPM 7) PH: 1-13 PH UNITS ENVIRONMENTAL QUALIFICATION: NA SEISMIC QUALIFICATION: NA QUALITY ASSURANCE: COMMERCIAL GRADE REDUNDANCY: 1 SAMPLE STATION FOR EACH UNIT <u>SENSOR(S):</u> <u>LOCATION:</u> POST ACCIDENT SAMPLING RADWASTE BUILDING STATION. POWER SUPPLY: ONSITE OR OFFSITE SOURCES LOCATION OF DISPLAY: ONSITE OR OFFSITE LAB ANALYSIS
CATEGORY:	3	
PURPOSE:	RELEASE ASSESSMENT; VERIFICATION; ANALYSIS	

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

A MODIFICATION IS TO BE INITIATED TO REVISE THE SAMPLING RANGE CAPABILITY FOR DISSOLVED HYDROGEN OR TOTAL GAS TO 25-400 CC/KG AND TO REVISE THE SAMPLING RANGE CAPABILITY FOR DISSOLVED OXYGEN TO 4-20 PPM. THESE CHANGES AGREE WITH THE BWR OWNERS' GROUP POSITION ON POST ACCIDENT SAMPLING PROVISIONS AS ACCEPTED BY THE NRC IN CORRESPONDENCE DATED JULY 17, 1984 (W.V. JOHNSTON, NRC TO C.G. SHERWOOD, GENERAL ELECTRIC COMPANY).

SCHEDULE FOR UPGRADE:

THE SCHEDULE FOR REVISING THE SAMPLING RANGE CAPABILITIES LISTED ABOVE IS BY THE END OF THE FIRST REFUELING OUTAGE FOR EACH UNIT FOLLOWING THE SPRING 1984 UNIT 2 REFUELING OUTAGE.

NOTES:

1) PROVISIONS ARE MADE FOR SAMPLING THE PRIMARY COOLANT AND/OR SUPPRESSION POOL. THIS SAMPLING CAPABILITY COMPLETELY SATISFIES THE REGULATORY GUIDE 1.97 REQUIREMENT FOR PRIMARY COOLANT AND SUMP SAMPLING BECAUSE SUPPRESSION POOL ACTIVITY IS CONSIDERED A REPRESENTATIVE SAMPLE OF ECCS LEAKAGE IN THE DRYWELL OR REACTOR BUILDING. ADDITIONAL INFORMATION CONCERNING PEACH BOTTOM'S POST ACCIDENT SAMPLING AND ANALYSIS PROVISIONS HAS PREVIOUSLY BEEN PROVIDED TO THE NRC IN LETTERS FROM S.L. DALTROFF (PECO) TO J.F. STOLZ (NRC), DATED 1/31/83 AND 12/12/83, AND IN LETTERS FROM S.L. DALTROFF (PECO) TO T.E. MURLEY (REGION I), DATED 12/30/83, 2/16/84, AND 5/11/84. SUBJECT: POST ACCIDENT SAMPLING.

NRC ACCEPTANCE OF PEACH BOTTOM'S POST ACCIDENT SAMPLING PROVISIONS HAS BEEN DOCUMENTED IN A LETTER FROM J.F. STOLZ (NRC) TO E.G. BAUER (PECO) DATED 10/6/83, SUBJECT: POST ACCIDENT SAMPLING.

VARIABLE NO. E13

DESCRIPTION:	CONTAINMENT AIR (GRAB SAMPLE)	INSTALLED RANGE:	(SEE NOTE 1) 1) HYDROGEN CONTENT: 0.1 TO 30 % 2) OXYGEN CONTENT: 0.1 TO 30 % 3) GAMMA SPECTRUM (ISOTOPIC ANALYSIS)
REQUIRED RANGE:	1) HYDROGEN CONTENT: 0-30% 2) OXYGEN CONTENT: 0-30% 3) GAMMA SPECTRUM: (ISOTOPIC ANALYSIS)	ENVIRONMENTAL QUALIFICATION:	NA
CATEGORY:	3	SEISMIC QUALIFICATION:	NA
PURPOSE:	RELEASE ASSESSMENT; VERIFICATION; ANALYSIS	QUALITY ASSURANCE:	COMMERCIAL GRADE
		REDUNDANCY:	1 SAMPLE STATION FOR EACH UNIT
		<u>SENSOR(S):</u> POST ACCIDENT SAMPLING STATION	<u>LOCATION:</u> RADWASTE BUILDING
		POWER SUPPLY:	ONSITE OR OFFSITE SOURCES
		LOCATION OF DISPLAY:	ONSITE OR OFFSITE LAB ANALYSIS

EXCEPTIONS TO REGULATORY GUIDE 1.97 AND JUSTIFICATION:

NONE

MODIFICATIONS PROPOSED:

NONE

SCHEDULE FOR UPGRADE:

NONE

NOTES:

1) ADDITIONAL INFORMATION CONCERNING PEACH BOTTOM'S POST ACCIDENT SAMPLING AND ANALYSIS PROVISIONS HAS PREVIOUSLY BEEN PROVIDED TO THE NRC IN A LETTER FROM S.L. DALTROFF (PECO) TO J.F. STOLZ (NRC) DATED 1/31/83, SUBJECT: POST ACCIDENT SAMPLING.

NRC ACCEPTANCE OF PEACH BOTTOM'S POST ACCIDENT SAMPLING PROVISIONS HAS BEEN DOCUMENTED IN A LETTER FROM J.F. STOLZ (NRC) TO E.G. BAUER (PECO) DATED 10/6/83, SUBJECT: POST ACCIDENT SAMPLING.