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PNPS 1999 EVALUATED EXERCISE EVENT SCHEDULE

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Event:	Exercise Controller Meeting
Date:	Monday, December 6, 1999
Time:	0800 - 1200
Location:	EOF
Attendees:	Controllers
Event:	Exercise Player Meeting
Date:	Monday, December 6, 1999
Time:	1300-1400
Location:	Engineering & Support Bldg., Conf. Rm. 2a/b
Attendees:	Players
Event:	NRC Entrance and Briefing
Date:	Monday, December 6, 1999
Time:	1500 - 1630
Location:	Engineering & Support Bldg., Conf. Rm. 3A
Attendees:	Invited personnel only
Event: Date: Time: Location: Attendees:	NRC Evaluated Exercise Tuesday, December 7, 1999 0800 EOF, TSC, OSC, Simulator, MC Players, Controllers, NRC Evaluators, Federal and Commonwealth Participants
Event:	Lead Controller Debrief
Date:	Tuesday, December 7, 1999
Time:	Immediately following the exercise
Location:	EOF
Attendees:	Lead Exercise Controller and Lead Facility Controllers
Event:	Exercise Critique and NRC Exit
Date:	Thursday, December 9, 1999
Time:	0900 - 1000
Location:	Engineering & Support Bldg., Conf. Rm. 3A
Attendees:	Invited personnel only
Event:	Exercise Critique
Date:	Thursday, December 9, 1999
Time:	1400 - 1500
Location:	Engineering & Support Bldg., Conf. Rm. 2a/b
Attendees:	Players and Controllers

CONFIDENTIAL - EXERCISE SCENARIO

SCOPE

The 1999 Pilgrim Nuclear Power Station (PNPS) Emergency Preparedness Evaluated Exercise to be conducted during the week beginning December 6, 1999, will test, and provide the opportunity to evaluate, the Pilgrim Emergency Plan and Emergency Plan Implementing Procedures (EPIPs). It will also test the Emergency Response Organization's (ERO) ability to assess, identify, classify, and respond to emergency conditions and take appropriate actions to protect the health and safety of the public. The Control Room (Simulator), Operations Support Center (OSC), Technical Support Center (TSC), Emergency Operations Facility (EOF), and Media Center (MC) will be activated and personnel assigned to those facilities will participate in the exercise. Local government agencies, the Massachusetts Emergency Management Agency (MEMA), and the Massachusetts Department of Public Health (MPDH) will participate.

The scenario will initially simulate a reactor transient with fuel failure and high drywell pressure causing an Alert. Elevated containment radiation levels then lead to a Site Area Emergency. A subsequent steam leak in the Reactor Building leads to an elevated radioactive release to the environment. When Main Stack radiation readings exceed threshold levels, a General Emergency will be declared. These classifications and escalations will test the effectiveness of the integrated capabilities of Pilgrim's ERO with the Commonwealth of Massachusetts and Local Governments with respect to protective action decisions and communications.

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OBJECTIVES

Exercise Planning

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- A1) Conduct an exercise of the PNPS Emergency Plan.
- A2) Provide for Commonwealth of Massachusetts participation.
- A3) Prepare an exercise information package.
- A4) Conduct a critique of the exercise.
- A5) Prepare an exercise report.
- A6) Identify open items.
- A8) Conduct an exercise in various weather conditions (during different seasons) (Winter scenario).
- A10) Conduct an Ingestion Pathway Exercise.

Emergency Organization, Support, and Resources

- B1) Demonstrate the prompt activation, adequacy of staffing, and setup of facilities.
- B2) Demonstrate the capability of the ERO to implement EPIPs.
- B3) Demonstrate the ability of the Emergency Director to provide overall direction.
- B4) Demonstrate the ability to effectively transfer command and control of emergency response functions from the CR to the EOF.
- B6) Demonstrate the capability of the ERO to interface with Commonwealth and local governments.
- B7) Demonstrate the ability to control access to emergency facilities.
- B8) Demonstrate the ability to provide a liaison at each participating offsite governmental emergency operations center (EOC).
- B9) Demonstrate adequacy of facilities and equipment to support emergency operations.
- B10) Demonstrate the ability to request assistance from Federal agencies.
- B13) Demonstrate the ability to notify on-call ERO personnel and document acceptable response times.

Incident Assessment and Classification

- C1) Demonstrate the ability to make rapid assessment of radiological hazards, including the dispatch and coordination of Radiation Monitoring Teams (RMTs).
- C2) Demonstrate the ability to recognize Emergency Action Levels (EALs) and properly classify emergencies in accordance with EPIPs.

Notification and Communications

- D1) Demonstrate the ability to notify offsite emergency organizations within 15 minutes.
- D2) Demonstrate the ability to notify the NRC of any emergency classification within one hour of the declaration.
- D3) Demonstrate the ability to notify PNPS ERO personnel.
- D4) Demonstrate the ability to develop and send timely follow-up information messages for offsite authorities.
- D5) Demonstrate the communications capability between the CR (Simulator), TSC, OSC, Media Center, and EOF.
- D6) Demonstrate the communications capability between PNPS and local government/Commonwealth.
- D8) Demonstrate the adequacy of communications capabilities between PNPS and the RMTs.

Radiological Consequence Assessment

- E1) Demonstrate methods and techniques for determining the source term of releases.
- E2) Demonstrate the adequacy of methods and techniques for determining the magnitude of releases based on plant system parameters and effluent monitors.
- E3) Demonstrate the ability to estimate integrated dose from projected and actual dose rates and compare to Environmental Protection Agency Protective Action Guidelines.
- E4) Demonstrate the ability to monitor and control emergency worker exposure and implement exposure guidelines.
- E12) Demonstrate the capability for onsite and offsite radiological monitoring.
- E13) Demonstrate the ability to collect and analyze simulated elevated airborne or liquid samples.

Protective Action

- F1) Demonstrate the ability to make Protective Action Recommendations to offsite authorities.
- F2) Demonstrate the ability to advise individuals onsite or in owner controlled areas of emergency conditions.

Public Information

- G1) Demonstrate the operations of the Media Center and the availability of space for the media.
- G2) Demonstrate the ability to brief the media in a clear, accurate, and timely manner.
- G3) Demonstrate coordination of information prior to its release.
- G4) Demonstrate the ability to establish and operate rumor control in a coordinated fashion.

NARRATIVE SUMMARY

Initial Conditions

It is December 7, 1999, the Reactor has been at 100% power for the last 280 days. The "B" Control Rod Drive (CRD) pump is tagged out for repair.

The wind is from the ESE at 8-10 MPH. It is a cloudy fall morning. The temperature is 40 degrees.

Sequence of Events

The exercise is initiated when operators in the Control Room (Simulator) receive indications and recognize that the "B" Reactor Feedwater pump (RFP) has tripped. During the subsequent power reduction, indications are received of main turbine high vibration. While responding to the high vibration condition, turbine vibrations rise to the trip set point and the main turbine trips. The reactor subsequently fails to auto scram following the turbine trip vibration. Manual tripping of the Reactor Protection System (RPS) is also ineffective. A large fuel element failure results from the resultant high pressure and high power conditions.

Safety relief valves and one code safety valve lift in response to the high pressure condition. The code safety valve fails to fully reseat following reduction in reactor pressure. Control rod insertion is achieved via manual actuation of the Anticipated Transient Without Scram (ATWS) system.

During the transient, the 480 volt motor control center (MCC) B-17 trips when in-house electrical leads shift to the off-site power source. The leaking code safety valve pressurizes the drywell to above the Emergency Core Cooling System initiation setpoint and results in elevated radiation levels. The high pressure coolant injection system (HPCI) lines up to inject, but injection is terminated by the operators in accordance with Emergency Operating Procedures (EOPs).

The Watch Engineer should then declare an ALERT based on Emergency Action Level (EAL) 3.4.1.2, Primary Containment pressure cannot be maintained below 2.2. PSIG or EAL 1.2.1.2 Air Ejector OffGas Monitors reading > 20,000 MR/hr. When the Alert is declared, the emergency response organization (ERO) is notified by activation of the Computerized Automated Notification System (CANS). When sufficient numbers of the ERO members arrive at the Technical Support Center (TSC), the Operations Support Center (OSC), the Emergency Operations Facility (EOF), and the Media Center (MC), each facility will be activated.

Operators are expected to close the Main Steam Isolation Valves (MSIVs) when they determine the extent of fuel damage and commence plant cooldown utilizing periodic cycling of the safety relief valves in accordance with EOPs.

About an hour after the Alert is declared, indications are received that the Bus A1 fails due to a bus lockout. This causes the loss of the two remaining Reactor Feedwater pumps. Operators are expected to use Reactor Core Isolation Cooling (RCIC) for Reactor Water Level control. When they do, the RCIC cooling water valve fails to open. OSC Teams should be sent out to manually open the RCIC cooling water valve and investigate the status of Bus A1.

Drywell Containment High Radiation Monitoring System (CHRMS) readings will increase due to the weeping safety valve. After about 2 hours of elapsed time, the Drywell (CHRMS) readings exceed 200 R/hr. The Watch Engineer should declare a SITE AREA EMERGENCY based on EAL 1.4.1.3, Drywell CHRMS reading greater than 200R/hr.

Plant cooldown will continue until about 3 hours of elapsed time when a steam line break on HPCI results in a steam leak into secondary containment. HPCI fails to auto-isolate and attempts by the operators to manually isolate the system are unsuccessful. High temperatures and radiation levels will be observed in the HPCI areas in the Reactor Building. Radioactivity is released through the Standby Gas Treatment System (SBGT) and Main Stack to the environment. Operators enter into EOP-04 and EOP-05.

HPCI area temperatures continue to rise and radioactive release rates increase due to failed fuel and the steam leak.

Radiation levels will increase to be in excess of 240,000 CPS on the Main Stack Radiation Monitors.

A GENERAL EMERGENCY will be declared based on EAL 5.1.1.4, Main Stack Radiation Monitors reading grater than 2.4 E5CPS. The EOF should provide Protective Action Recommendations (PARs) to the Commonwealth.

The reactor will depressurize through the ruptured HPCI steam line until MCC B-17 is repaired and HPCI is isolated. When HPCI is isolated, the release into secondary containment is stopped and offsite releases trend downward.

The exercise will terminate when all objectives have been met.

TIMELINE

Elapsed Time	Actual Time	Event	Details/Expected Actions
-0030		Exercise Controllers in position.	
-0020		Initial conditions Established. (Message All-01)	Simulator crew is briefed. The plant is at 100% power. "B" CRD pump is tagged out.
-0005		Announcement of the Exercise. (Message CR-02)	Control room announcer (on-shift NWE or NOS) makes initiating announcement over Gaitronics system.
0000		Exercise commences. "B" RFP trip (Message SIM-03)	The crew in the Control Room (Simulator) recognizes Reactor Feedwater Pump "B" trip and high turbine vibration. The following alarms/indications are received:
			RFP B TRIP C1L-A2 RFP B OVERLOAD C1L-B2 TURBINE VIBRATION HI C2L-A3
0010		Main Turbine Trip (Message SIM-04)	The main turbine trips on high vibration. The Reactor fails to auto scram. The following alarms/indications are received:
			TURBINE VIBRATION HI HI C2L-B1.
			No green full-in lights are lit on the Full Core Display.
0010		Reactor Scram. (Message SIM-05)	Operators should manually scram the Reactor. Initial manual scram fails. Operators enter EOP-2, "RPV Control." The following alarms/indications are received by the CR:
			No green full-in lights are lit on the Full Core Display.
0010		Rod Insertion Failure (Message SIM-06).	Operators recognize that control rods have failed to insert causing a high power ATWS. Operators must use the ATWS push-buttons to scram. The following alarms/indications are received:
			All green full-in lights are lit on the Full Core Display.

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Elapsed Time	Actual Time	Event	Details/Expected Actions
0010		Fuel element failure. (Message Sim-07)	The power transient has resulted in a large fuel element failure. The following alarms/indications are received: THIRTEEN MINUTE TIMER INITIATED CP600R-B3 PRETREATMENT RAD HI HI CP600R-A4. PRETREATMENT RAD HI CP600R-B4.
0010		MCC B-17 Trip (Message SIM-08).	Operators recognize that Motor Control Center (MCC) B-17 has tripped. The following alarms/indications are received:
			B-17 TRIP C3LC-D4
0012		Safety Valve Failure High Drywell Pressure (Message SIM-09)	The operators recognize High Drywell Pressure and elevated radiation levels due to failure of a code safety valve to properly reseat. Operators enter EOP-3. The following alarms/indications are received:
			DRYWELL PRESSURE HI C903C-A6
0014		HPCI line-up (Message SIM-10)	Operators recognize that HPCI has lined up to inject based on the High Drywell Pressure signal. The operators inhibit HPCI injection. The following alarms/indications are received:
			White HPCI Injection Light is lit on the C903 Apron.
0015		Alert	The Nuclear Watch Engineer declares an ALERT based on EAL 3.4.1.2, Primary Containment pressure > 2.2 PSIG. or 1.2.1.2 Air Ejector Offgas monitors 1705-3A and B readings > 20,000 MR/hr.
0017		High Main Stack radiation. MSIVs closed. (Message SIM-11)	Operators receive and recognize high main stack effluent radiation readings. Operators close the MSIVs when they determine that fuel damage has occurred. The following alarms/indicators are received.
			MAIN STACK RAD HI CP600R-B8.

Elapsed Time	Actual Time	Event	Details/Expected Actions
0020		Alert announcement. (Message CR-12)	CR announcer announces Alert over Gaitronics.
0025		Contingency Alert message. (Message SIM-13X)	Controllers will issue this message only if the Alert has not been declared by this time.
0030		Coolant sample request.	The NWE may request a Reactor Coolant sample be taken.
0040		ERO Mobilization.	The ERO should be mobilizing and activating Emergency Facilities.
0050		OSC Team Request	NWE requests OSC team to troubleshoot MCC B-17.
0100		OSC B-17 Team Reports (Message OSC-14)	The OSC B-17 team reports B-17 breaker at B1 damaged, repair time is 3- 4 hours.
0100		Plant cooldown.	Plant data shows that a cooldown, using RCIC, is in progress. Drywell CHRMS continues to increase due to safety valve leak.
0115		Facility Activation.	TSC, OSC and EOF should be activated. The ED should have taken over command and control of the emergency from the NWE/NOS.
0115		Bus A1 Trip. (Message SIM-15)	Operators recognize Bus A-1 has tripped. The following alarms/indications are received:
			A-1 LOCKOUT C3LC-C1 RFP A TRIP C1L-A1 RFP C TRIP C1L-A3 CONDENSER PUMP TRIP C1L-A6
0130		OSC Bus A-1 Team dispatched.	A team from the OSC should be sent out to trouble shoot the bus A-1 trip.
0130		Governor's declaration of emergency.	The Governor of Massachusetts should have declared a State of Emergency.
0130		RCIC Cooling Water Valve Failure (Message SIM-16)	Operators recognize failure of RCIC cooling water supply valve MO-1301-62 to open. The following alarms/indications are received:
			GOV END BRG TEMP HI C904L-F1 CPLNG END BRG TEMP HI C904L-G1

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Elapsed Time	Actual Time	Event	Details/Expected Actions
0130		OSC RCIC Team Dispatched	An OSC Team to manually open MO-1301-62 is dispatched.
0145		OSC MO-1301-62 Team Reports (Message OSC-17)	OSC MO-1301-62 Team Reports that the valve has been opened locally.
0155		OSC Bus A1 Team reports damage. (Message OSC-18)	The OSC Bus A1 team reports that the A1 Bus is faulted and must be replaced.
0155		Parks/recreational areas closed.	The towns should report that parks/recreational areas have been closed.
0155		Drywell CHRMS increases to >200 R/hr. (Message SIM-19)	Control Room Operators recognize an increase in Drywell CHRMS radiation levels >200 R/hr.
0200		Site Area Emergency (SAE)	The ED declares the SAE based on EAL 1.4.1.3., Drywell CHRMS reading >200 R/hr.
			Offsite notifications are made.
0205		SAE Announcement. (Message CR-20)	CR announcer announces SAE over Gaitronics.
0215		Contingency SAE message. (Message EOF-21X)	Controllers will issue this message only if a SAE has not been declared by this time.
0230		Accountability is achieved.	une.
0230		Plant cooldown continues.	Plant cooldown will continue at a rate < 100°/hr. RPV pressure remains at levels consistent with the cooldown rate.
0235		Siren Activation, Offsite Precautionary Actions.	The Commonwealth should have activated EPZ Sirens/EAS. Transfer of school children, transportation pre- staging, and precautionary ingestion pathway activities should have been started.

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<i></i>	Elapsed Time	Actual Time	Event	Details/Expected Actions
	0310		HPCI Steam Line Break (Message SIM-22)	Operators recognize a steam leak into secondary containment caused by a steam line break on HPCI. The following alarms/indications are received:
				STEAM LEAKAGE AREA TEMP HI C904L-A6 HPCI ISOLATED C903C-A1 HPCI TURBINE TRIP C903C-A2 HPCI VALVES OVERLOAD C903C-D5 MO-2301-05 indicator lights on C903 are red-green.
				HPCI fails to auto isolate. Operators enter EOP-04, request manual isolation of HPCI. Release occurs through SBGT and Main Stack.
	0315		RPV pressure decreases	RPV pressure decreases via HPCI steamline rupture.
	0320		HPCI Team Reports. (Message OSC-23)	OSC HPCI Team reports to the CR/Simulator that manual isolation of HPCI is unsuccessful.
×	0320		High Main Stack Radiation Levels. (Message SIM-24)	Operators recognize High Main Stack Radiation. Operators enter EOP-05. The following alarms/indications are received:
				MAIN STACK RAD HI HI CP600R-A8 MAIN STACK RAD HI -CP600R-B8
	0325		RPV Blowdown	Operators blowdown the reactor vessel by SRVs in accordance with EOP-4, or EOP-5.
	0325		Main Stack radiation levels increase to > 2.4 E5cps (Message SIM-25)	HPCI area temperatures continue to rise. Main Stack radiation monitor readings increase to > 2.4 E5CPS due to failed fuel and the steam leak.
	0330		General Emergency (GE)	The ED declares the GE based on EAL 5.1.1.4, Main Stack Radiation Monitor readings > 2.4 E5CPS
	0335		CR GE announcement. (Message CR-26)	CR announcer announces General Emergency over Gaitronics.
,	0340		Contingency GE message. (Message EOF-27X).	Controllers issue this message if a GE has not been declared by this time.

Elapsed Time	Actual Time	Event	Details/Expected Actions
0345		Federal Assistance (Message EOF-28)	The EOF Dose Assessment/Rad. monitoring staff should recognize the need for additional monitoring/assessment resources and request assistance from the EOF NRC Representative.
0400		Siren activation, protective actions.	The Commonwealth should have activated sirens/EAS and directed Protective Actions to the public.
0425		OSC B-17 Team Reports (Message OSC-29)	The OSC MCC B-17 repair team reports that the B-17 breaker at B-1 has been repaired. B-17 is operating and HPCI can be isolated.
0430		Release rate lowers.	With B-17 repaired and HPCI isolated, the release into secondary containment is stopped and offsite releases trend downward.
0500		Exercise termination. (Message All-30)	The Exercise is terminated when all objectives have been demonstrated.

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PILGRIM NUCLEAR . JWER STATION 1999 EVALUATED EXERCISE #99-06

LAPSED IME	MESSAGE NO.	MESSAGE
0020	All-01	MESSAGE FOR: Watch Engineer and Lead Facility Players
		INFORMATION:
		INITIAL CONDITIONS
		It is December 7, 1999. The plant has been at 100% power for the previous 280 days. The "B" Control Rod Drive (CRD) pump is tagged out for repair.
		INITIAL METEROLOGICAL CONDITIONS
		The wind is from the ESE at 8-10 MPH. It is a cloudy fall morning. The temperature is 40 degrees.
0020	All-01	ADDITIONAL CONTROLLER INFORMATION:
		This message is to be presented when the control room (simulator) staff is in place and when the lead player at each facility arrives.
		ANTICIPATED PLAYER RESPONSE:
		Players should become familiar with the format and content of the message, plant parameter data and radiation data sheets. The NWE and lead players at each facility should brief all of their staff with this information.
005	CR-02	MESSAGE FOR: On Shift NWE/NOS
		INFORMATION:
		Have the control room make the following announcement over the page system:
		"Attention! Attention! This is the Control Room. Pilgrim Nuclear Power Station is commencing the 1999 Emergency Response Evaluated Exercise. All announcements preceded by "THIS IS A DRILL" are for designated exercise participants. All personnel are to limit use of Gaitronics until the exercise has been terminated."
005	CR-02	ADDITIONAL CONTROLLER INFORMATION:
		Provide this message to the On Shift NWE/NOS to initiate the 1999 Evaluated Exercise.
		ANTICIPATED PLAYER RESPONSE:
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PILGRIM NUCLEAR OWER STATION 1999 EVALUATED EXERCISE #99-06

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ELAPSED TIME	MESSAGE NO.	MESSAGE
0000	SIM-03	MESSAGE FOR: Watch Engineer/NOS
		INFORMATION:
		The following alarms/indications are received:
		RFP B TRIP C1L-A2 RFP B OVERLOAD C1L-B2 TURBINE VIBRATION HI C2L-A3
0000	SIM-03	ADDITIONAL CONTROLLER INFORMATION:
		Initiate the exercise by providing this message to the control room staff. This is the initial message for the 1999 Evaluated Exercise.
		"B" Reactor Feedwater pump has tripped and there is high turbine vibration.
		ANTICIPATED PLAYER RESPONSE:
		Operators will recognize RFP "B" trip and turbine vibration.
0010	SIM-04	MESSAGE FOR: Watch Engineer/NOS
		INFORMATION:
		The following alarms/indications are received:
		TURBINE VIBRATION HI HI C2L-B1 No-green full-in lights are lit on the Full Core Display
0010	SIM-04	ADDITIONAL CONTROLLER INFORMATION:
		Provide this message to the NWE.
		The main turbine has tripped. The Reactor fails to auto scram.
		ANTICIPATED PLAYER RESPONSE:
		Operators will recognize turbine trip and failure to scram. Actions are taken to manually scram.

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ELAPSED TIME	MESSAGE NO.	MESSAGE
0010	SIM-05	MESSAGE FOR: Watch Engineer/NOS
		INFORMATION:
		The following alarms/indications are received:
		No green full-in lights are lit on the Full Core Display.
0010	SIM-05	ADDITIONAL CONTROLLER INFORMATION:
		Provide the message to the NWE when they attempt to manually scram the reactor.
		The operators should have attempted to manually scram the reactor but manual scram fails. These indications show failure of reactor to scram.
		ANTICIPATED PLAYER RESPONSE:
		Operations should use the ATWS push buttons to scram. The operators should enter EOP-2, RPV Control, and procedures should be followed.
0010	SIM-06	MESSAGE FOR Watch Engineer
		INFORMATION.
		The following alarms/indications are received.
		All green full-in lights are lit on the Full Core Display.
0010	SIM-06	ADDITIONAL CONTROLLER INFORMATION:
0010		Present this message after the operator scrams the reactor using the ATWS push-buttons.
		These indications show that this scram is successful. However, because control rods initially failed to insert, a high power ATWS has occurred.
		ANTICIPATED PLAYER RESPONSE:
		Operators should recognize successful scram. The reactor pressure and water level should be maintained in accordance with EOP-2, "RPV Control, failure to scram" or EOP-1, "RPV control" after reactor shutdown status is determined.

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PLANT MESSAGES SUMMARY

ELAPSED TIME	MESSAGE NO.	MESSAGE
0010	SIM-07	MESSAGE FOR: Watch Engineer
		INFORMATION:
		The following alarms/indications are received:
		13 MIN TIMER INITIATED CP600R-B3 PRE-TREATMENT RAD HI HI CP600R-A4
		PRE-TREATMENT RAD HI CP600R-B4
0010	SIM-07	
0010	51101-07	ADDITIONAL CONTROLLER INFORMATION:
		Provide this message to the NWE.
		The power transient has resulted in large fuel element failure.
		ANTICIPATED PLAYER RESPONSE:
		The operators should recognize fuel element failure.
0010	SIM-08	MESSAGE FOR: Watch Engineer
		INFORMATION:
		The following alarms/indications are received:
		B-17 TRIP C3LC-D4
0010	SIM-08	ADDITIONAL CONTROLLER INFORMATION:
		Provide this message to the NWE.
		ANTICIPATED PLAYER RESPONSE:
		Operators should recognize that Motor Control Center (MCC) B-17 has tripped. NM/E will eventually request an OSC team to travitius has been been as a second s

Operators should recognize that Motor Control Center (MCC) B-17 has tripped. NWE will eventually request an OSC team to troubleshoot MCC B17.

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ELAPSED TIME	MESSAGE NO.	MESSAGE
0012	SIM-09	MESSAGE FOR: Watch Engineer
		INFORMATION:
		The following annunciators are received in the control room.
		DRYWELL PRESSURE HI C903C-A6.
0012	SIM-09	ADDITIONAL CONTROLLER INFORMATION:
		Present this message to the Watch Engineer.
		A code safety valve has opened and failed to reseat properly upon closure. Steam leakage into the Drywell has caused high drywell pressure and elevated radiation levels.
		ANTICIPATED PLAYER RESPONSE:
		The operators should recognize high Drywell Pressure and elevated radiation levels.
		An ALERT should be declared in accordance with EP-IP-100 on EAL 3.4.1.2 primary containment pressure > 2.2 psig or 1.2.1.2 air ejector off gas rad monitors > 20,000 MR/hr. A Gaitronics announcement should be made, CANS should be activated, the emergency facilities should be activated, and all offsite notifications should be made.
0014	SIM-10	MESSAGE FOR: Watch Engineer
		INFORMATION:
		The following alarms/indications are received:
		The white HPCI injection light on the C903 apron is lit.
0014	SIM-10	ADDITIONAL CONTROLLER INFORMATION:
		Present this message to the Watch Engineer
		HPCI has lined up to inject based on a high drywell pressure signal.
		ANTICIPATED PLAYER RESPONSE:
		Operators should recognize that HPCI has lined up to inject. They should inhibit HPCI injection,

PILGRIM NUCLEAR JUWER STATION 1999 EVALUATED EXERCISE #99-06

PLANT MESSAGES SUMMARY

ELAPSED TIME	MESSAGE NO.	MESSAGE
0017	SIM-11	MESSAGE FOR: Watch Engineer
		INFORMATION:
		The following alarms/indications are received:
		MAIN STACK RAD HI CP600R-B8
0017	SIM-11	ADDITIONAL CONTROLLER INFORMATION:
		Present this message to the Watch Engineer
		Main stack effluent radiation low range monitors have alarmed.
		ANTICIPATED PLAYER RESPONSE:
		Operators recognize high main stack readings. They should close MSIVs when they determine that fuel damage has occurred.
0020	CR-12	MESSAGE FOR: Control Room Nuclear Operations Supervisor
		INFORMATION:
		Have the control room sound the station alarm and make the following announcement over the Gaitronics.
		Please make the following Gaitronics announcement:
		THIS IS A DRILL THIS IS A DRILL
		"Attention all personnel; attention all personnel: An Alert has been declared due to primary containment pressure greater than 2.2 psig (or Air or Offgas radiation monitors >20,000 MR/hr). All on-call members of the Emergency Response Organization report to your designated emergency response facility. If this were an actual event, all Pilgrim personnel would assemble in their normal office or shop area, report to their supervisor, and await instructions. All visitors, all nonessential contractor personnel, all declared pregnant females and all handicapped personnel would leave the site at this time. For the purposes of this exercise, all non-exercise participants are to continue with your normal duties.
		THIS IS A DRILL THIS IS A DRILL

REPEAT MESSAGE

PILGRIM NUCLEAR POWER STATION 1999 EVALUATED EXERCISE #99-06

ELAPSED TIME	MESSAGE NO.	MESSAGE
0020	CR-12	ADDITIONAL CONTROLLER INFORMATION:
		Provide this message to the On-shift NWE/NOS to announce the Alert.
		ANTICIPATED PLAYER RESPONSE:
		Sound station alarm and make announcement over Gaitronics.
0025	SIM-13X	MESSAGE FOR: Watch Engineer/NOS
		CONTINGENCY ACTION MESSAGE:
		Declare an Alert based on EAL 3.4.1.2.
0025	SIM-13X	ADDITIONAL CONTROLLER INFORMATION:
		Provide this message to the ED (NWE) only if an Alert has not been declared by this time.
		ANTICIPATED PLAYER RESPONSE:
		Implement EP-IP-100, Attachment 2, "Alert." Activate CANS. Make Offsite notifications.
0100	OSC-14	MESSAGE FOR: Repair Team Leader at MCC B-17 Breaker
		INFORMATION:
		MCC B-17 breaker at B-1 is hot and colored black, There is the smell of burnt electrical equipment. There is no smoke and no fire. Repair time is at least 3-4 hours.
0100	OSC-14	ADDITIONAL CONTROLLER INFORMATION:
		This message should be provided to the OSC team when they arrive at B-17 Breaker B-1. Have team explain procedures, (including ALARA) tools/equipment needed, etc. to make repairs. The Breaker will eventually be repaired (see Message OSC-29). Do not allow repair before 0425.
		ANTICIPATED PLAYER RESPONSE:
		Report findings to the OSC.

PILGRIM NUCLEAR . OWER STATION 1999 EVALUATED EXERCISE #99-06

PLANT MESSAGES SUMMARY

ELAPSED TIME	MESSAGE NO.	MESSAGE
0115	SIM-15	MESSAGE FOR: Watch Engineer
		INFORMATION:
		The following alarms/indications are received:
		A-1 LOCKOUT C3LC-C1 RFP A TRIP C1L-A1 RFP C TRIP C1L-A3 CONDENSER PUMP TRIP C1L-A6
0115	SIM-15	ADDITIONAL CONTROLLER INFORMATION:
		Provide this message to the Watch Engineer
		ANTICIPATED PLAYER RESPONSE.
		Operators should recognize that Bus A1 has tripped. The TSC will be notified by the Control Room. A repair team should be assigned to trouble shoot the Bus-A1 trip.
0130	SIM-16	MESSAGE FOR: Watch Engineer
		INFORMATION:
		The following alarms/indications are received.
		GOV END BRG TEMP HI C904L-F1 CPLNG END BRG TEMP HI C904L-G1
130	SIM-16	ADDITIONAL CONTROLLER INFORMATION:
		Provide this message to the Watch Engineer. When operators initiate RCIC, the RCIC cooling water supply valve MO-1301-62 fails to open.
		ANTICIPATED PLAYER RESPONSE:
		The operators should request an OSC team to manually open the valve.
145	OSC-17	MESSAGE FOR: Repair Team Leader at RCIC cooling water supply valve
		INFORMATION:
		INFORMATION.

PILGRIM NUCLEAR POWER STATION 1999 EVALUATED EXERCISE #99-06

PLANT MESSAGES SUMMARY

ELAPSED TIME	MESSAGE NO.	MESSAGE
0145	OSC-17	ADDITIONAL CONTROLLER INFORMATION:
		This message will be presented to the repair team leader at the RCIC cooling water supply valve/control center after they demonstrate knowledge and procedures to open the valve.
		Ensure that simulator controllers are notified immediately when the valve is opened.
		ANTICIPATED PLAYER RESPONSE:
		The repair team should demonstrate the physical and administrative actions and procedures necessary, including ALARA, to open the valve. They should report valve opening to OSC/CR.
0155	OSC-18	MESSAGE FOR: OSC Teams at Bus A1
		INFORMATION:
		Bus A1 is faulted. It is hot and colored black. There is the smell of burnt electrical equipment. There is no smoke and no fire Bus A1 must be replaced. Replacement time is greater than 24 hours.
0155	OSC-18	ADDITIONAL CONTROLLER INFORMATION:
		Present this message to OSC Bus A1 team when they arrive. Have teams explain procedures (including ALARA), tools/equipment needed, etc. to make replacement.
		ANTICIPATED PLAYER RESPONSE:
		Report damage and replacement time to OSC.
0155	SIM-19	MESSAGE FOR: Watch Engineer
		INFORMATION:

Drywell CHRMS readings on RIT-1001-606A and B and RIT-1001-607A and B have increased to levels > 200 R/Hr.

PILGRIM NUCLEAK FOWER STATION 1999 EVALUATED EXERCISE #99-06

ELAPSED TIME	MESSAGE NO.	MESSAGE
0155	SIM-19	ADDITIONAL CONTROLLER INFORMATION:
		Provide this message to the NWE.
		Drywell CHRMS readings have been increasing due to fission products (as a result of the fuel failure) entering the Drywell through the leaking safety valve The level is now above the EAL for a SITE AREA EMERGENCY. While primary containment radiation levels are high, the third and final barrier has not been breached.
		ANTICIPATED PLAYER RESPONSE:
		When the TSC & EOF become aware of the Drywell CHRMS radiation levels, the Emergency Director should declare a SITE AREA EMERGENCY in accordance with EP-IP-100 based on "Containment High Range Radiation Monitor readings > 200 R/Hr." (EAL 1.4.1.3). EP-IP-100, Attachment 3, "Site Area Emergency" should be implemented. A Gaitronics announcement should be made. The Emergency Plant Manager should be notified. Offsite agencies should be notified by the EOF.
0205	CR-20	MESSAGE FOR: Control Room Nuclear Operations Supervisor
		INFORMATION:
		Have the Control Room sound the station alarm and make the following announcement over Gaitronics
		THIS IS A DRILL THIS IS A DRILL
		Attention all personnel! Attention all personnel!! A SITE AREA EMERGENCY has been declared due to high containment radiation. Had this been an actual emergency, all personnel who are NOT part of the Emergency Response Organization would be directed to evacuate to the designated assembly area and would receive further instructions at your exit gate. For the purpose of the exercise, non-exercise participants are to continue with your normal duties.
		THIS IS A DRILL THIS IS A DRILL
		(REPEAT MESSAGE)
)205	CR-20	ADDITIONAL CONTROLLER INFORMATION:
		Provide this message to the On Watch NOS.
		Announce the SAE over Gaitronics.

PILGRIM NUCLEAN OWER STATION 1999 EVALUATED EXERCISE #99-06

ELAPSED TIME	MESSAGE NO.	MESSAGE
0215	EOF-21X	MESSAGE FOR: Emergency Director
		INFORMATION:
		Declare a SITE AREA EMERGENCY due to "Containment High Range Area Radiation Monitoring reading > 200 R/Hr." (EAL 1.4.1.3).
0215	EOF-21X	ADDITIONAL CONTROLLER INFORMATION:
		Deliver this message only if a SITE AREA EMERGENCY has not been declared.
		ANTICIPATED PLAYER RESPONSE:
		A SITE AREA EMERGENCY should be declared. The control room should be prompted to make an announcement of the SITE AREA EMERGENCY. The EOF should implement EP-IP-100, Attachment 3, and make offsite notifications.
0310	SIM-22	MESSAGE FOR: Watch Engineer
		INFORMATION:
		The following alarms/indications are received:
		STEAM LEAKAGE AREA TEMP HI C904L-A6 HPCI ISOLATED C903C-A1 HPCI TURBINE TRIP C903C-A2
		HPCI VALVES OVERLOAD C903C-D5 MO-2301-05 indicator lights on C903C are Red-Green
0310	SIM-22	ADDITIONAL CONTROLLER INFORMATION:
		Present this message to the Watch Engineer.
		A steam line break on HPCI has caused a steam leak into secondary containment. HPCI failed to auto-isolate. A radiation release to the environment occurs through SBGT.
		ANTICIPATED PLAYER RESPONSE.
		Operators recognize steam leak into secondary containment and failure of HPCI to auto-isolate. They enter EOP-4 and request manual isolation of HPCI.

PILGRIM NUCLEAR POWER STATION 1999 EVALUATED EXERCISE #99-06

ELAPSED TIME	MESSAGE NO.	MESSAGE
0320	OSC-23	MESSAGE FOR: Repair team at HPCI
		INFORMATION:
		Manual isolation of HPCI is not possible due to mechanical failure of HPCI Isolation Valve 2301-05.
0320	OSC-23	ADDITIONAL CONTROLLER INFORMATION:
		Present this message to the OSC team leader at the "B" RHR valve room after they describe the procedure to isolate HPCI.
		All preliminary considerations must be addressed ALARA, physical protection from hot steam, and administrative approvals. Proper clothing and equipment must be available and demonstrated.
		NOTE: In-plant radiation readings assume that the HPCI Room air-tight door is ajar and steam is leaking out into the building. The atmosphere gets damper and the floors/walls/equipment get wetter as the stairs down to the RHR quad and HPCI room is approached. The stairwell is filled with steam.
		ANTICIPATED PLAYER RESPONSE:
		The repair team should demonstrate their ability to isolate HPCI. They must display or confirm that all administrative requirements have been met. When informed that HPCI cannot be isolated, they should report this to the OSC.
0320	SIM-24	MESSAGE FOR: Watch Engineer
		INFORMATION:
		The following annunciators are received in the Control Room.
		MAIN STACK RAD HI HI CP600R-A8 MAIN STACK RAD HI CP600R-B8
0320	SIM-24	ADDITIONAL CONTROLLER INFORMATION:
		Present this information to the Watch Engineer.
		Main stack effluent radiation levels have been increasing due to fission products (as a result of the fuel failure) entering the Reactor Bldg through the HPCI leak. The readings have increased above the alarm threshold which will sound in the Control Room. Readings will then quickly rise above the EAL for a GENERAL EMERGENCY.
		ANTICIPATED PLAYER RESPONSE:
		The operators should recognize increasing Main Stack Radiation levels.

PILGRIM NUCLEAR FOWER STATION 1999 EVALUATED EXERCISE #99-06

ELAPSED TIME	MESSAGE NO.	MESSAGE
0325	SIM-25	MESSAGE FOR: Watch Engineer
		INFORMATION:
		Main stack radiation monitors 1705-18A and B are reading > 2.4 E5CPS
0325	SIM-25	ADDITIONAL CONTROLLER INFORMATION:
		Present this information to the Watch Engineer.
		ANTICIPATED PLAYER RESPONSE:
		When the TSC & EOF become aware of the Main Stack radiation levels, the Emergency Director should declare a GENERAL EMERGENCY in accordance with EP-IP-100 based on "Main stack radiation levels > 2.4 E5CPS (EAL 5.1.1.4). EP-IP-100, Attachment 4, "General Emergency should be implemented. A Gaitronics announcement should be made. The Emergency Plant Manager should be notified. Offsite agencies should be notified by the EOF. Protective Action Recommendations should be made to offsite authorities.
0335	CR-26	MESSAGE FOR: Control Room Nuclear Operations Supervisor
		INFORMATION:
		Have the control room sound the station alarm and make the following announcement over Gaitronics.
		THIS IS A DRILL THIS IS A DRILL
		"Attention all personnel! Attention all personnel! A GENERAL EMERGENCY has been declared due to a High Main Stack Radiation Levels. For the purpose of the exercise, all non-exercise participants are to continue with your normal duties. There will be no eating, drinking or smoking until further notice.
		THIS IS A DRILL THIS IS A DRILL
		(REPEAT MESSAGE)
0335	CR-26	ADDITIONAL CONTROLLER INFORMATION:
		Present this message to the On Watch NOS.
		ANTICIPATED PLAYER RESPONSE:
		Make the Gaitronics announcement.
0340	EOF-27X	MESSAGE FOR: Emergency Director
		INFORMATION:
		Declare a GENERAL EMERGENCY based on EAL 5.1.1.4

PILGRIM NUCLEAN OWER STATION 1999 EVALUATED EXERCISE #99-06

1

ELAPSED TIME	MESSAGE NO.	MESSAGE
0340	EOF-27X	ADDITIONAL CONTROLLER INFORMATION:
		Deliver this message only if a GENERAL EMERGENCY has not been declared.
		ANTICIPATED PLAYER RESPONSE:
		The Emergency Director should declare a GENERAL EMERGENCY in accordance with EAL 5.1.1.4. EP-IP-100, Attachment 4, "General Emergency" should be implemented. An announcement should be made on Gaitronics. Offsite notifications should be made from the EOF. PARs should be provided to the Commonwealth by the Emergency Director.
0345	EOF-28	MESSAGE FOR: ED/EOM/Offsite Rad. Supervisor
		INFORMATION:
		We have spoken with Steve Centore, the Region I DOE RAP Team Leader, He will have an advance team with 4 Rad. Monitors here within 4 hours. He can also have the Region I Mobile Laboratory (with extensive monitoring/analysis capabilities) and 6 additional personnel here within 8 hours.
0345	EOF-28	ADDITIONAL CONTROLLER INFORMATION:
		Provide this message to the EOF staff about 10 minutes after they request assistance.
		ANTICIPATED PLAYER RESPONSE:
		Dose Assessment/EOF management should recognize the need for additional monitoring assistance and request it from the NRC EOF Rep. They should plan monitoring and assessment around the additional resources.
0425	OSC-29	MESSAGE FOR: OSC team at MCC B-17 Breaker B-1
		INFORMATION:
		Breaker B-1 has been repaired. MCC B-17 is available/operational.
0425	OSC-29	ADDITIONAL CONTROLLER INFORMATION:
		Provide this message to the B-17 team. Do not allow repair before 0425. Ensure that you notify the Simulator controllers immediately after giving this message to the players.
		ANTICIPATED PLAYER RESPONSE:
		OSC team should notify the OSC/CR simulator of the repair of B-1 and B-17 availability.

PILGRIM NUCLEAN OWER STATION 1999 EVALUATED EXERCISE #99-06

PLANT MESSAGES SUMMARY

ELAPSED MESSAGE MESSAGE TIME NO. 0500 All-30 MESSAGE FOR: Watch Engineer **Emergency Director** Emergency Plant Manager Company Spokesperson in the Media Center INFORMATION: The 1999 Evaluated Exercise is terminated. Have the Control Room make following Gaitronics announcement. Attention! Attention! This is the Control Room. The Pilgrim Nuclear Power Station 1999 Evaluated Exercise has been completed. No further exercise announcements will be made. 0500 All-30 ADDITIONAL CONTROLLER INFORMATION: Provide this message to the person in charge of each facility only when the Lead Exercise Controller has determined that all objectives have been tested. ANTICIPATED PLAYER RESPONSE:

All players should assemble all of the written material that was generated during the exercise for assembly by the Lead Facility Controller. All logbooks, procedure manuals, and engineering materials should be returned to the proper files.

MESSAGE FORM

SCENARIO NO. 99-06

MESSAGE NO. All-01

ELAPSED TIME -0020

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

MESSAGE FOR: Watch Engineer and Lead Facility Players

INFORMATION:

INITIAL CONDITIONS

It is December 7, 1999. The plant has been at 100% power for the previous 280 days. The "B" Control Rod Drive (CRD) pump is tagged out for repair.

INITIAL METEROLOGICAL CONDITIONS

The wind is from the ESE at 8-10 MPH. It is a cloudy fall morning. The temperature is 40 degrees.

MESSAGE FORM

SCENARIO NO. 99-06

MESSAGE NO. All-01

ELAPSED TIME -0020

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

ADDITIONAL CONTROLLER INFORMATION:

This message is to be presented when the control room (simulator) staff is in place and when the lead player at each facility arrives.

ANTICIPATED PLAYER RESPONSE:

Players should become familiar with the format and content of the message, plant parameter data and radiation data sheets. The NWE and lead players at each facility should brief all of their staff with this information.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME -0005

MESSAGE NO. CR-02

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

MESSAGE FOR: On Shift NWE/NOS

INFORMATION:

Have the control room make the following announcement over the page system:

"Attention! Attention! This is the Control Room. Pilgrim Nuclear Power Station is commencing the 1999 Emergency Response Evaluated Exercise. All announcements preceded by "THIS IS A DRILL" are for designated exercise participants. All personnel are to limit use of Gaitronics until the exercise has been terminated."

MESSAGE FORM

SCENARIO NO. 99-06

MESSAGE NO. CR-02

ELAPSED TIME -0005

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

ADDITIONAL CONTROLLER INFORMATION:

Provide this message to the On Shift NWE/NOS to initiate the 1999 Evaluated Exercise.

ANTICIPATED PLAYER RESPONSE:

The NWE/NOS will make the announcement on the Gaitronics system.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0000

MESSAGE NO. SIM-03

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

MESSAGE FOR: Watch Engineer/NOS

INFORMATION:

The following alarms/indications are received:

RFP B TRIP C1L-A2 RFP B OVERLOAD C1L-B2 TURBINE VIBRATION HI C2L-A3

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0000

MESSAGE NO. SIM-03

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

ADDITIONAL CONTROLLER INFORMATION:

Initiate the exercise by providing this message to the control room staff. This is the initial message for the 1999 Evaluated Exercise.

"B" Reactor Feedwater pump has tripped and there is high turbine vibration.

ANTICIPATED PLAYER RESPONSE:

Operators will recognize RFP "B" trip and turbine vibration.

MESSAGE FORM

SCENARIO NO. 99-06

MESSAGE NO. SIM-04

ELAPSED TIME 0010

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

MESSAGE FOR: Watch Engineer/NOS

INFORMATION:

The following alarms/indications are received:

TURBINE VIBRATION HI HI C2L-B1 No-green full-in lights are lit on the Full Core Display

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0010

MESSAGE NO. SIM-04

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

ADDITIONAL CONTROLLER INFORMATION:

Provide this message to the NWE.

The main turbine has tripped. The Reactor fails to auto scram.

ANTICIPATED PLAYER RESPONSE:

Operators will recognize turbine trip and failure to scram. Actions are taken to manually scram.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0010

MESSAGE NO. SIM-05

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

MESSAGE FOR: Watch Engineer/NOS

INFORMATION:

The following alarms/indications are received:

No green full-in lights are lit on the Full Core Display.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0010

MESSAGE NO. SIM-05

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

ADDITIONAL CONTROLLER INFORMATION:

Provide the message to the NWE when they attempt to manually scram the reactor.

The operators should have attempted to manually scram the reactor but manual scram fails. These indications show failure of reactor to scram.

ANTICIPATED PLAYER RESPONSE:

Operations should use the ATWS push buttons to scram. The operators should enter EOP-2, RPV Control, and procedures should be followed.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0010

MESSAGE NO. SIM-06

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

MESSAGE FOR: Watch Engineer

INFORMATION:

The following alarms/indications are received.

All green full-in lights are lit on the Full Core Display.

MESSAGE FORM

SCENARIO NO. 99-06

MESSAGE NO. SIM-06

ELAPSED TIME 0010

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

ADDITIONAL CONTROLLER INFORMATION:

Present this message after the operator scrams the reactor using the ATWS push-buttons. These indications show that this scram is successful. However, because control rods initially failed to insert, a high power ATWS has occurred.

ANTICIPATED PLAYER RESPONSE:

Operators should recognize successful scram.

The reactor pressure and water level should be maintained in accordance with EOP-2, "RPV Control, failure to scram" or EOP-1, "RPV control" after reactor shutdown status is determined.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0010

MESSAGE NO. SIM-07

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

MESSAGE FOR: Watch Engineer

INFORMATION:

The following alarms/indications are received:

13 MIN TIMER INITIATED CP600R-B3 PRE-TREATMENT RAD HI HI CP600R-A4

PRE-TREATMENT RAD HI CP600R-B4

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0010

MESSAGE NO. SIM-07

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

ADDITIONAL CONTROLLER INFORMATION:

Provide this message to the NWE.

The power transient has resulted in large fuel element failure.

ANTICIPATED PLAYER RESPONSE:

The operators should recognize fuel element failure.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0010

MESSAGE NO. SIM-08

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

MESSAGE FOR: Watch Engineer

INFORMATION:

The following alarms/indications are received:

B-17 TRIP C3LC-D4

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0010

MESSAGE NO. SIM-08

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

ADDITIONAL CONTROLLER INFORMATION:

Provide this message to the NWE.

ANTICIPATED PLAYER RESPONSE:

Operators should recognize that Motor Control Center (MCC) B-17 has tripped. NWE will eventually request an OSC team to troubleshoot MCC B17.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0012

MESSAGE NO. SIM-09

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

MESSAGE FOR: Watch Engineer

INFORMATION:

The following annunciators are received in the control room.

DRYWELL PRESSURE HI C903C-A6.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0012

MESSAGE NO. SIM-09

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

ADDITIONAL CONTROLLER INFORMATION:

Present this message to the Watch Engineer.

A code safety valve has opened and failed to reseat properly upon closure. Steam leakage into the Drywell has caused high drywell pressure and elevated radiation levels.

ANTICIPATED PLAYER RESPONSE:

The operators should recognize high Drywell Pressure and elevated radiation levels.

An ALERT should be declared in accordance with EP-IP-100 on EAL 3.4.1.2 primary containment pressure > 2.2 psig or 1.2.1.2 air ejector off gas rad monitors > 20,000 MR/hr. A Gaitronics announcement should be made, CANS should be activated, the emergency facilities should be activated, and all offsite notifications should be made.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0014

MESSAGE NO. SIM-10

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

MESSAGE FOR: Watch Engineer

INFORMATION:

The following alarms/indications are received:

The white HPCI injection light on the C903 apron is lit.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0014

MESSAGE NO. SIM-10

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

ADDITIONAL CONTROLLER INFORMATION:

Present this message to the Watch Engineer

HPCI has lined up to inject based on a high drywell pressure signal.

ANTICIPATED PLAYER RESPONSE:

Operators should recognize that HPCI has lined up to inject. They should inhibit HPCI injection.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0017

MESSAGE NO. SIM-11

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

MESSAGE FOR: Watch Engineer

INFORMATION:

The following alarms/indications are received:

MAIN STACK RAD HI CP600R-B8

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0017

MESSAGE NO. SIM-11

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

ADDITIONAL CONTROLLER INFORMATION:

Present this message to the Watch Engineer

Main stack effluent radiation low range monitors have alarmed.

ANTICIPATED PLAYER RESPONSE:

Operators recognize high main stack readings. They should close MSIVs when they determine that fuel damage has occurred.

MESSAGE FORM

SCENARIO NO. 99-06

MESSAGE NO. CR-12

ELAPSED TIME 0020

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

MESSAGE FOR: Control Room Nuclear Operations Supervisor

INFORMATION:

Have the control room sound the station alarm and make the following announcement over the Gaitronics.

Please make the following Gaitronics announcement:

THIS IS A DRILL THIS IS A DRILL

"Attention all personnel; attention all personnel: An Alert has been declared due to primary containment pressure greater than 2.2 psig (or Air or Offgas radiation monitors >20,000 MR/hr). All on-call members of the Emergency Response Organization report to your designated emergency response facility. If this were an actual event, all Pilgrim personnel would assemble in their normal office or shop area, report to their supervisor, and await instructions. All visitors, all nonessential contractor personnel, all declared pregnant females and all handicapped personnel would leave the site at this time. For the purposes of this exercise, all non-exercise participants are to continue with your normal duties.

THIS IS A DRILL THIS IS A DRILL

REPEAT MESSAGE

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0020

MESSAGE NO. CR-12

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

ADDITIONAL CONTROLLER INFORMATION:

Provide this message to the On-shift NWE/NOS to announce the Alert.

ANTICIPATED PLAYER RESPONSE:

Sound station alarm and make announcement over Gaitronics.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0025

MESSAGE NO. SIM-13X

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

MESSAGE FOR: Watch Engineer/NOS

CONTINGENCY ACTION MESSAGE:

Declare an Alert based on EAL 3.4.1.2.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0025

MESSAGE NO. SIM-13X

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

ADDITIONAL CONTROLLER INFORMATION:

Provide this message to the ED (NWE) only if an Alert has not been declared by this time.

ANTICIPATED PLAYER RESPONSE:

Implement EP-IP-100, Attachment 2, "Alert." Activate CANS. Make Offsite notifications.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0100

MESSAGE NO. OSC-14

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

MESSAGE FOR: Repair Team Leader at MCC B-17 Breaker

INFORMATION:

MCC B-17 breaker at B-1 is hot and colored black, There is the smell of burnt electrical equipment . There is no smoke and no fire. Repair time is at least 3-4 hours.

MESSAGE FORM

SCENARIO NO. 99-06

MESSAGE NO. OSC-14

ELAPSED TIME 0100

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

ADDITIONAL CONTROLLER INFORMATION:

This message should be provided to the OSC team when they arrive at B-17 Breaker B-1. Have team explain procedures, (including ALARA) tools/equipment needed, etc. to make repairs. The Breaker will eventually be repaired (see Message OSC-29). Do not allow repair before 0425.

ANTICIPATED PLAYER RESPONSE:

Report findings to the OSC.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0115

MESSAGE NO. SIM-15

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

MESSAGE FOR: Watch Engineer

INFORMATION:

The following alarms/indications are received:

A-1 LOCKOUT C3LC-C1 RFP A TRIP C1L-A1 RFP C TRIP C1L-A3 CONDENSER PUMP TRIP C1L-A6

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0115

MESSAGE NO. SIM-15

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

ADDITIONAL CONTROLLER INFORMATION:

Provide this message to the Watch Engineer

ANTICIPATED PLAYER RESPONSE:

Operators should recognize that Bus A1 has tripped. The TSC will be notified by the Control Room. A repair team should be assigned to trouble shoot the Bus-A1 trip.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0130

MESSAGE NO. SIM-16

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

MESSAGE FOR: Watch Engineer

INFORMATION:

The following alarms/indications are received.

GOV END BRG TEMP HI C904L-F1 CPLNG END BRG TEMP HI C904L-G1

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0130

MESSAGE NO. SIM-16

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

ADDITIONAL CONTROLLER INFORMATION:

Provide this message to the Watch Engineer. When operators initiate RCIC, the RCIC cooling water supply valve MO-1301-62 fails to open.

ANTICIPATED PLAYER RESPONSE:

The operators should request an OSC team to manually open the valve.

MESSAGE FORM

SCENARIO NO. 99-06

MESSAGE NO. OSC-17

ELAPSED TIME 0145

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

MESSAGE FOR: Repair Team Leader at RCIC cooling water supply valve

INFORMATION:

RCIC cooling water supply valve has been opened locally.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0145

MESSAGE NO. OSC-17

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

ADDITIONAL CONTROLLER INFORMATION:

This message will be presented to the repair team leader at the RCIC cooling water supply valve/control center after they demonstrate knowledge and procedures to open the valve.

Ensure that simulator controllers are notified immediately when the valve is opened.

ANTICIPATED PLAYER RESPONSE:

The repair team should demonstrate the physical and administrative actions and procedures necessary, including ALARA, to open the valve. They should report valve opening to OSC/CR.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0155

MESSAGE NO. OSC-18

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

MESSAGE FOR: OSC Teams at Bus A1

INFORMATION:

Bus A1 is faulted. It is hot and colored black. There is the smell of burnt electrical equipment. There is no smoke and no fire.. Bus A1 must be replaced. Replacement time is greater than 24 hours.

MESSAGE FORM

SCENARIO NO. 99-06

MESSAGE NO. OSC-18

ELAPSED TIME 0155

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

ADDITIONAL CONTROLLER INFORMATION:

Present this message to OSC Bus A1 team when they arrive. Have teams explain procedures (including ALARA), tools/equipment needed, etc. to make replacement.

ANTICIPATED PLAYER RESPONSE:

Report damage and replacement time to OSC.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0155

MESSAGE NO. SIM-19

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

MESSAGE FOR: Watch Engineer

INFORMATION:

Drywell CHRMS readings on RIT-1001-606A and B and RIT-1001-607A and B have increased to levels > 200 R/Hr.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0155

MESSAGE NO. SIM-19

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

ADDITIONAL CONTROLLER INFORMATION:

Provide this message to the NWE.

Drywell CHRMS readings have been increasing due to fission products (as a result of the fuel failure) entering the Drywell through the leaking safety valve.. The level is now above the EAL for a SITE AREA EMERGENCY. While primary containment radiation levels are high, the third and final barrier has not been breached.

ANTICIPATED PLAYER RESPONSE:

When the TSC & EOF become aware of the Drywell CHRMS radiation levels, the Emergency Director should declare a SITE AREA EMERGENCY in accordance with EP-IP-100 based on "Containment High Range Radiation Monitor readings > 200 R/Hr." (EAL 1.4.1.3). EP-IP-100, Attachment 3, "Site Area Emergency" should be implemented. A Gaitronics announcement should be made. The Emergency Plant Manager should be notified. Offsite agencies should be notified by the EOF.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0205

MESSAGE NO. CR-20

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

MESSAGE FOR: Control Room Nuclear Operations Supervisor

INFORMATION:

Have the Control Room sound the station alarm and make the following announcement over Gaitronics

THIS IS A DRILL THIS IS A DRILL

Attention all personnel! Attention all personnel!! A SITE AREA EMERGENCY has been declared due to high containment radiation. Had this been an actual emergency, all personnel who are NOT part of the Emergency Response Organization would be directed to evacuate to the designated assembly area and would receive further instructions at your exit gate. For the purpose of the exercise, non-exercise participants are to continue with your normal duties.

THIS IS A DRILL THIS IS A DRILL

(REPEAT MESSAGE)

MESSAGE FORM

SCENARIO NO. 99-06

MESSAGE NO. CR-20

ELAPSED TIME 0205

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

ADDITIONAL CONTROLLER INFORMATION:

Provide this message to the On Watch NOS.

ANTICIPATED PLAYER RESPONSE:

Announce the SAE over Gaitronics.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0215

MESSAGE NO. EOF-21X

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

MESSAGE FOR: Emergency Director

INFORMATION:

Declare a SITE AREA EMERGENCY due to "Containment High Range Area Radiation Monitoring reading > 200 R/Hr." (EAL 1.4.1.3).

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0215

MESSAGE NO. EOF-21X

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

ADDITIONAL CONTROLLER INFORMATION:

Deliver this message only if a SITE AREA EMERGENCY has not been declared.

ANTICIPATED PLAYER RESPONSE:

A SITE AREA EMERGENCY should be declared. The control room should be prompted to make an announcement of the SITE AREA EMERGENCY. The EOF should implement EP-IP-100, Attachment 3, and make offsite notifications.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0310

MESSAGE NO. SIM-22

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

MESSAGE FOR: Watch Engineer

INFORMATION:

The following alarms/indications are received:

STEAM LEAKAGE AREA TEMP HI C904L-A6 HPCI ISOLATED C903C-A1 HPCI TURBINE TRIP C903C-A2 HPCI VALVES OVERLOAD C903C-D5 MO-2301-05 indicator lights on C903C are Red-Green

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0310

MESSAGE NO. SIM-22

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

ADDITIONAL CONTROLLER INFORMATION:

Present this message to the Watch Engineer.

A steam line break on HPCI has caused a steam leak into secondary containment. HPCI failed to auto-isolate. A radiation release to the environment occurs through SBGT.

ANTICIPATED PLAYER RESPONSE:

Operators recognize steam leak into secondary containment and failure of HPCI to autoisolate. They enter EOP-4 and request manual isolation of HPCI.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0320

MESSAGE NO. OSC-23

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

MESSAGE FOR: Repair team at HPCI

INFORMATION:

Manual isolation of HPCI is not possible due to mechanical failure of HPCI Isolation Valve 2301-05.

MESSAGE FORM

SCENARIO NO. 99-06

MESSAGE NO. OSC-23

ELAPSED TIME 0320

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

ADDITIONAL CONTROLLER INFORMATION:

Present this message to the OSC team leader at the "B" RHR valve room after they describe the procedure to isolate HPCI.

All preliminary considerations must be addressed -- ALARA, physical protection from hot steam, and administrative approvals. Proper clothing and equipment must be available and demonstrated.

NOTE: In-plant radiation readings assume that the HPCI Room air-tight door is ajar and steam is leaking out into the building. The atmosphere gets damper and the floors/walls/equipment get wetter as the stairs down to the RHR quad and HPCI room is approached. The stairwell is filled with steam.

ANTICIPATED PLAYER RESPONSE:

The repair team should demonstrate their ability to isolate HPCI. They must display or confirm that all administrative requirements have been met. When informed that HPCI cannot be isolated, they should report this to the OSC.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0320

MESSAGE NO. SIM-24

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

MESSAGE FOR: Watch Engineer

INFORMATION:

The following annunciators are received in the Control Room.

MAIN STACK RAD HI HI CP600R-A8 MAIN STACK RAD HI CP600R-B8

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0320

MESSAGE NO. SIM-24

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

ADDITIONAL CONTROLLER INFORMATION:

Present this information to the Watch Engineer.

Main stack effluent radiation levels have been increasing due to fission products (as a result of the fuel failure) entering the Reactor Bldg through the HPCI leak. The readings have increased above the alarm threshold which will sound in the Control Room. Readings will then quickly rise above the EAL for a GENERAL EMERGENCY.

ANTICIPATED PLAYER RESPONSE:

The operators should recognize increasing Main Stack Radiation levels.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0325

MESSAGE NO. SIM-25

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

MESSAGE FOR: Watch Engineer

INFORMATION:

Main stack radiation monitors 1705-18A and B are reading > 2.4 E5CPS

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0325

MESSAGE NO. SIM-25

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

ADDITIONAL CONTROLLER INFORMATION:

Present this information to the Watch Engineer.

ANTICIPATED PLAYER RESPONSE:

When the TSC & EOF become aware of the Main Stack radiation levels, the Emergency Director should declare a GENERAL EMERGENCY in accordance with EP-IP-100 based on "Main stack radiation levels > 2.4 E5CPS (EAL 5.1.1.4). EP-IP-100, Attachment 4, "General Emergency should be implemented. A Gaitronics announcement should be made. The Emergency Plant Manager should be notified. Offsite agencies should be notified by the EOF. Protective Action Recommendations should be made to offsite authorities.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0335

MESSAGE NO. CR-26

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

MESSAGE FOR: Control Room Nuclear Operations Supervisor

INFORMATION:

Have the control room sound the station alarm and make the following announcement over Gaitronics.

THIS IS A DRILL THIS IS A DRILL

"Attention all personnel! Attention all personnel! A GENERAL EMERGENCY has been declared due to a High Main Stack Radiation Levels. For the purpose of the exercise, all non-exercise participants are to continue with your normal duties. There will be no eating, drinking or smoking until further notice.

THIS IS A DRILL THIS IS A DRILL

(REPEAT MESSAGE)

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0335

MESSAGE NO. CR-26

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

ADDITIONAL CONTROLLER INFORMATION:

Present this message to the On Watch NOS.

ANTICIPATED PLAYER RESPONSE:

Make the Gaitronics announcement.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0340

MESSAGE NO. EOF-27X

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

MESSAGE FOR: Emergency Director

INFORMATION:

Declare a GENERAL EMERGENCY based on EAL 5.1.1.4

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0340

MESSAGE NO. EOF-27X

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

ADDITIONAL CONTROLLER INFORMATION:

Deliver this message only if a GENERAL EMERGENCY has not been declared.

ANTICIPATED PLAYER RESPONSE:

The Emergency Director should declare a GENERAL EMERGENCY in accordance with EAL 5.1.1.4. EP-IP-100, Attachment 4, "General Emergency" should be implemented. An announcement should be made on Gaitronics. Offsite notifications should be made from the EOF. PARs should be provided to the Commonwealth by the Emergency Director.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0345

MESSAGE NO. EOF-28

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

MESSAGE FOR: ED/EOM/Offsite Rad. Supervisor

INFORMATION:

We have spoken with Steve Centore, the Region I DOE RAP Team Leader, He will have an advance team with 4 Rad. Monitors here within 4 hours. He can also have the Region I Mobile Laboratory (with extensive monitoring/analysis capabilities) and 6 additional personnel here within 8 hours.

MESSAGE FORM

SCENARIO NO. 99-06

MESSAGE NO. EOF-28

ELAPSED TIME 0345

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

ADDITIONAL CONTROLLER INFORMATION:

Provide this message to the EOF staff about 10 minutes after they request assistance.

ANTICIPATED PLAYER RESPONSE:

Dose Assessment/EOF management should recognize the need for additional monitoring assistance and request it from the NRC EOF Rep. They should plan monitoring and assessment around the additional resources.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0425

MESSAGE NO. OSC-29

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

MESSAGE FOR: OSC team at MCC B-17 Breaker B-1

INFORMATION:

Breaker B-1 has been repaired. MCC B-17 is available/operational.

MESSAGE FORM

SCENARIO NO. 99-06

MESSAGE NO. OSC-29

ELAPSED TIME 0425

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

ADDITIONAL CONTROLLER INFORMATION:

Provide this message to the B-17 team. Do not allow repair before 0425. Ensure that you notify the Simulator controllers immediately after giving this message to the players.

ANTICIPATED PLAYER RESPONSE:

OSC team should notify the OSC/CR simulator of the repair of B-1 and B-17 availability.

MESSAGE FORM

SCENARIO NO. 99-06

MESSAGE NO. All-30

ELAPSED TIME 0500

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

MESSAGE FOR: Watch Engineer Emergency Director Emergency Plant Manager Company Spokesperson in the Media Center

INFORMATION:

The 1999 Evaluated Exercise is terminated. Have the Control Room make following Gaitronics announcement.

Attention! Attention! This is the Control Room. The Pilgrim Nuclear Power Station 1999 Evaluated Exercise has been completed. No further exercise announcements will be made.

MESSAGE FORM

SCENARIO NO. 99-06

ELAPSED TIME 0500

MESSAGE NO. All-30

TIME

THIS IS A DRILL DO NOT INITIATE ACTIONS AFFECTING NORMAL PLANT OPERATIONS

ADDITIONAL CONTROLLER INFORMATION:

Provide this message to the person in charge of each facility only when the Lead Exercise Controller has determined that all objectives have been tested.

ANTICIPATED PLAYER RESPONSE:

All players should assemble all of the written material that was generated during the exercise for assembly by the Lead Facility Controller. All logbooks, procedure manuals, and engineering materials should be returned to the proper files.

Elapsed Time	Reactor Power	RPV Pressure	RPV Water Level	Drywell Temp	Torus Water Temp	Torus Water Level	Drywell Pressure	Torus Pressure	Containment H2	Containment O2
-0:15	100	1033	30	110	73	129	1.30	-0.01	0	0
0:00	100	1033	30	110	73	129	1.30	-0.01	0	0
0:01	68	993	28	106	73	129	1.27	-0.01	0	0
0:05	3	935	29	114	78	129	1.50	0.50	0	0
0:15	3	905	31	127	78	130	2.66	1.26	0	0
0:30	2	803	30	187	84	131	6.6	5.1	0	0
0:45	1	707	30	214	88	131	9.3	8.2	0	0
1:00	1	567	30	222	92	130	10.7	9.7	0	0
1:15	1	446	20	224	95	130	11.1	10.3	0	0
1:30	1	370	10	228	94	130	12.5	11.3	0	0
1:45	1	309	10	234	93	129	13.7	12.4	0	0
2:00	1	248	10	236	92	129	14.1	12.9	0	0
2:15	1	208	10	239	91	129	14.2	13.1	0	0
2:30	1	182	10	242	91	129	14.6	13.5	0	0
2:45	1	152	10	245	92	129	15.0	14.1	0	0
3:00	1	100	10	246	92	130	16.4	15.0	0	0
3:15	1	50	10	226	88	130	13.4	12.0	0	0
3:30	1	50	10	200	86	129	10.4	9.4	0	0
3:45	1	50	10	179	83	129	7.1	5.7	0	0
4:00	0.5	50	10	157	80	129	4.3	3.0	0	0
4:15	0.5	50	10	138	78	129	2.3	1.3	0	0
4:30	0.5	50	10	122	76	129	1.7	0.8	0	0
4:45	0.5	50	10	117	74	129	1.3	0.4	0	0
5:00	0.5	50	10	110	73	129	1.3	0.1	0	0

Elapsed Time	UAT	S/U XFMR	S/D SFMR	EDG A	EDG B	BODG	Trip Signal	MODE SWITCH	SBLC A	SBLC B	SBLC Level
-0:15	insrvc	avail	avail	avail	avail	avail		Run	avail	avail	4,300
0:00	insrvc	avail	avail	avail	avail	avail		Run	avail	avail	4,300
0:01	005	insrvc	avail	insrvc	insrvc	avail	Manual	S/D	avail	avail	4,300
0:05	005	insrvc	avail	insrvc	insrvc	avail	Manual	S/D	avail	avail	4,300
0:15	00S	insrvc	avail	insrvc	insrvc	avail	Manual	S/D	avail	avail	4,300
0:30	00S	insrvc	avail	insrvc	insrvc	avail	Manual	S/D	avail	avail	4,300
0:45	005	insrvc	avail	insrvc	insrvc	avail	Manual	S/D	avail	avail	4,300
1:00	005	insrvc	avail	insrvc	insrvc	avail	Manual	S/D	avail	avail	4,300
1:15	00S	insrvc	avail	insrvc	insrvc	avail	Manuai	S/D	avail	avail	4,300_
1:30	00S	insrvc	avail	insrvc	insrvc	avail	Manual	S/D	avail	avail	4,300
1:45	005	insrvc	avail	insrvc	insrvc	avail	Manual	S/D	avail	avail	4,300
2:00	00S	insrvc	avail	insrvc	insrvc	avail	Manual	S/D	avail	avail	4,300
2:15	005	insrvc	avail	insrvc	insrvc	avail	Manual	S/D	avail	avail	4,300
2:30	005	insrvc	avail	insrvc	insrvc	avail	Manual	S/D	avail	avail	4,300
2:45	005	insrvc	avail	insrvc	insrvc	avail	Manual	S/D	avail	avail	4,300
3:00	005	insrvc	avail	insrvc	insrvc	avail	Manual	S/D	avail	avail	4,300
3:15	005	insrvc	avail	insrvc	insrvc	avail	Manual	S/D	avail	avail	4,300
3:30	005	insrvc	avail	insrvc	insrvc	avail	Manual	S/D	avail	avail	4,300
3:45	005	insrvc	avail	insrvc	insrvc	avail	Manual	S/D	avail	avail	4,300
4:00	005	insrvc	avail	insrvc	insrvc	avail	Manual	S/D	avail	avail	4,300
4:15	005	insrvc	avail	insrvc	insrvc	avail	Manual	S/D	avail	avail	4,300
4:30	005	insrvc	avail	insrvc	insrvc	avail	Manual	S/D	avail	avail	4,300
4:45	00S	insrvc	avail	insrvc	insrvc	avail	Manual	S/D	avail	avail	4,300
5:00	00S	insrvc	avail	insrvc	insrvc	avail ·	Manual	S/D	avail	avail	4,300

Elapsed Time	RHR A	RHR C	A RHR Loop Flow	A RHR MODE	RHR B	RHR D	B RHR Loop Flow	B RHR MODE	CS A	A CS Loop Flow	CS B	ଟି CS Loop ନାତ୍ୟ
-0:15	avail	avail	<u> 0 </u>		avail	avail	0		avail	0	avail	0
0:00	avail	avail	0		avail	avail	0		avail	0	avail	0
0:01	avail	avail	0		avail	avail	0		avail	0	avail	<u> 0 </u>
0:05	avail	avail	0		avail	avail	0		avail	0	avail	<u> 0 </u>
0:15	avail	avail	0		avail	avail	0		avail	0	avail	0
0:30	insrvc	insrvc	4900	Torus Cooling	insrvc	insrvc	4,900	Torus Cooling	avail	<u> 0 </u>	avail	0
0:45	insrvc	insrvc	4900	Torus Cooling	insrvc	insrvc	_4,900_	Torus Cooling	avail	0	avail	<u> 0 </u>
1:00	insrvc	insrvc		Torus Cooling	insrvc	insrvc	4,900	Torus Cooling	avail	0	avail	0
1:15	insrvc	insrvc	4900	Torus Cooling	insrvc	insrvc	4,900	Torus Cooling	avail	0	avail	0
1:30	insrvc	insrvc		Torus Cooling	insrvc	insrvc	_4,900_	Torus Cooling	avail	<u> 0 </u>	avail	0
1:45	insrvc	insrvc	4900	Torus Cooling	insrvc	insrvc	4,900	Torus Cooling	avail	0	avail	0
2:00	insrvc	insrvc	4900	Torus Cooling	insrvc	insrvc	4,900	Torus Cooling	avail	0	avail	0
2:15	insrvc	insrvc	4900	Torus Cooling	insrvc	insrvc	4,900	Torus Cooling	avail	0	avail	<u> 0 </u>
2:30	insrvc	insrvc	4900	Torus Cooling	insrvc	insrvc	4,900	Torus Cooling	avail	0	avail	0
2:45	insrvc	insrvc	4900	Torus Cooling	insrvc	insrvc	4,900	Torus Cooling	avail	0	avail	0
3:00	insrvc	insrvc		Torus Cooling	insrvc	insrvc	_4,900_	Torus Cooling	avail	0	avail	0
3:15	insrvc	insrvc		Torus Cooling	insrvc	insrvc	4,900	Torus Cooling	avail	0	avail	0
3:30	insrvc	insrvc	4900	Torus Cooling	insrvc	insrvc	_4,900_	Torus Cooling	avail	0	avail	0
3:45	insrvc	insrvc	4900	Torus Cooling	insrvc	insrvc	4,900	Torus Cooling	avail	0	avail	0
4:00	insrvc	insrvc		Torus Cooling	insrvc	insrvc	4,900	Torus Cooling	avail	0	avail	0
4:15	insrvc	insrvc	4900	Torus Cooling	insrvc	insrvc	<u>4,900</u>	Torus Cooling	avail	0	avail	0
4:30	insrvc	insrvc	4900	Torus Cooling	insrvc	insrvc	4,900	Torus Cooling	avail	0	avail	0
4:45	insrvc	insrvc	4900	Torus Cooling	insrvc	insrvc	4,900_	Torus Cooling	avail	0	avail	0
5:00	insrvc	insrvc		Torus Cooling	insrvc	insrvc	4,900	Torus Cooling	avail	0	avail	0

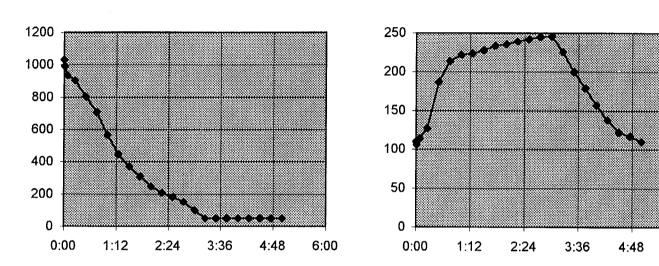
Elapsed Time	GP 1 Req	GP 2 Req	GP 3 Req	GP 4 Req	GP 5 Req	GP 6 Req	GP 1 Isol	GP 2 Isol	GP 3 Isol	GP 4 Isol	GP 5 Isol	GP 6 Isol	PCIS Bypassed
-0:15	N	N	Y	N	N	N	N	N	Y	N	Ν	N	
0:00	Ν	Ν	Y	Ν	Ν	Ν	N	Ν	Y	Ν	N	Ν	
0:01	Ν	Y	Y	Ν	Ν	Y	Ν	Y	Y	N	N	Y	
0:05	N	Y	Y	N	N	Y	Ν	Y	Y	N	N	Y	
0:15	Ν	Y	Y	N	N	Y	N	Y	Y	Ν	Ν	Y	
0:30	N	Y	Y	N	Ν	Y	Y	Y	Y	N	Ν	Y	
0:45	Ν	Y	Y	N	Ν	Y	Y	Y	Y	Ν	Ν	Y	
1:00	Ν	Y	Y	Ν	Ν	Y	Y	Y	Y	Ν	Ν	Y	
1:15	N	Y	Y	Ν	N	Y	Y	Y	Y	N	N	Y	
1:30	N	Y	Y	N	N	Y	Y	Y	Y	Ν	N	Y	
1:45	Ν	Y	Y	Ν	N	Y	Y	Y	Y	Ν	Ν	Y	
2:00	Ν	Y	Y	Ν	Ν	Y	Y	Y	Y	Ν	N	Y	
2:15	Ν	Y	Y	N	Ν	Y	Y	Y	Y	Ν	N	Y	
2:30	Ν	Y	Y	N	Ν	Y	Y	Y	Y	Ν	N	Y	
2:45	Ν	Y	Y	N	Ν	Y	Y	Y	Y	Ν	N	Y	
3:00	Ν	Y	Y	Ν	Ν	Y	Y	Y	Y	Ν	N	Y	
3:15	Ν	Y	Y	Y	Ν	Y	Y	Y	Y	Ν	Ν	Y	
3:30	Ν	Y	Y	Y	Ν	Y	Y	Y	Y	N	Ν	Y	
3:45	Ν	Y	Y	Y	N	Y	Y	Y	Y	Ν	N	Y	
4:00	N	Y	Y	Y	Ν	Y	Y	Y	Y	Ν	N	Y	
4:15	N	Y	Y	Y	Ν	Y	Y	Y	Y	Ν	N	Y	
4:30	Ν	Y	Y	Y	N	Y	Y	Y	Y	Ν	N	Y	
4:45	Ν	Y	Y	Y	Ν	Y	Y	Y	Y	Ν	Ν	Y	
5:00	N	Y	Y	Y	Ν	Y	Y	Y	Y	Ν	Ν	Y	

Elapsed Time	RBCCW A	RBCCW B	RBCCW C	RBCCW D	RBCCW E	RBCCW F	TBCCW A	TBCCW B	SSW A	SSW B	SSW D	SSW E	ssw c	SEA WATER A	SEA WATER B
-0:15	avail	insrvc	avail	avail	avail	insrvc	insrvc	avail	avail	insrvc	insrvc	insrvc	avail	insrvc	insrvc
0:00	avail	insrvc	avail	avail	avail	insrvc	insrvc	avail	avail	insrvc	insrvc	insrvc	avail	insrvc	insrvc
0:01	avail	insrvc	avail	avail	avail	insrvc	insrvc	avail	avail	insrvc	insrvc	insrvc	avail	avail	avail
0:05	avail	insrvc	avail	avail	avail	insrvc	insrvc	avail	avail	insrvc	insrvc	insrvc	avail	avail	avail
0:15	avail	insrvc	avail	avail	avail	insrvc	insrvc	avail	insrvc	insrvc	insrvc	insrvc	avail	avail	avail
0:30	insrvc	insrvc	avail	avail	insrvc	insrvc	insrvc	avail	insrvc	insrvc	insrvc	insrvc	avail	avail	avail
0:45	insrvc	insrvc	avail	avail	insrvc	insrvc	insrvc	avail	insrvc	insrvc	insrvc	insrvc	avail	avail	avail
1:00	insrvc	insrvc	avail	avail	insrvc	insrvc	insrvc	avail	insrvc	insrvc	insrvc	insrvc	avail	avail	avail
1:15	insrvc	insrvc	avail	avail	insrvc	insrvc	insrvc	avail	insrvc	insrvc	insrvc	insrvc	avail	avail	avail
1:30	insrvc	insrvc	avail	avail	insrvc	insrvc	insrvc	avail	insrvc	insrvc	insrvc	insrvc	avail	avail	avail
1:45	insrvc	insrvc	avail	avail	insrvc	insrvc	insrvc	avail	insrvc	insrvc	insrvc	insrvc	avail	avail	avail
2:00	insrvc	insrvc	avail	avail	insrvc	insrvc	insrvc	avail	insrvc	insrvc	insrvc	insrvc	avail	avail	avail
2:15	insrvc	insrvc	avail	avail	insrvc	insrvc	insrvc	avail	insrvc	insrvc	insrvc	insrvc	avail	avail	avail
2:30	insrvc	insrvc	avail	avail	insrvc	insrvc	insrvc	avail	insrvc	insrvc	insrvc	insrvc	avail	avail	avail
2:45	insrvc	insrvc	avail	avail	insrvc	insrvc	insrvc	avail	insrvc	insrvc	insrvc	insrvc	avail	avail	avail
3:00	insrvc	insrvc	avail	avail	insrvc	insrvc	insrvc	avail	insrvc	insrvc	insrvc	insrvc	avail	avail	avail
3:15	insrvc	insrvc	avail	avail	insrvc	insrvc	insrvc	avail	insrvc	insrvc	insrvc	insrvc	avail	avail	avail
3:30	insrvc	insrvc	avail	avail	insrvc	insrvc	insrvc	avail	insrvc	insrvc	insrvc	insrvc	avail	avail	avail
3:45	insrvc	insrvc	avail	avail	insrvc	insrvc	insrvc	avail	insrvc	insrvc	insrvc	insrvc	avail	avail	avail
4:00	insrvc	insrvc	avail	avail	insrvc	insrvc	insrvc	avail	insrvc	insrvc	insrvc	insrvc	avail	avail	avail
4:15	insrvc	insrvc	avail	avail	insrvc	insrvc	insrvc	avail	insrvc	insrvc	insrvc	insrvc	avail	avail	avail
4:30	insrvc	insrvc	avail	avail	insrvc	insrvc	insrvc	avail	insrvc	insrvc	insrvc	insrvc	avail	avail	avail
4:45	insrvc	insrvc	avail	avail	insrvc	insrvc	insrvc	avail	insrvc	insrvc	insrvc	insrvc	avail	avail	avail
5:00	insrvc	insrvc	avail	avail	insrvc	insrvc	insrvc	avail	insrvc	insrvc	insrvc	insrvc	avail	avail	avail

Elapsed Time	HPCI STATUS	HPCI MODE	RCIC STATUS	RCIC MODE	RECIRC A	A Recirc Speed	RECIRC B	B Recirc Speed	CRD A	CRD B	SBGT A	SBGT B
-0:15	avail		avail		insrvc	<u>69.8</u>	insrvc	<u>69.8</u>	insrvc	insrvc	avail	avail
0:00	avail		avail		insrvc	<u>69.8</u>	insrvc	<u>69.8</u>	insrvc	insrvc	avail	avail
0:01	avail		avail		avail	<u>28</u>	avail	<u>28</u>	insrvc	insrvc	avail	insrvc
0:05	avail		avail		avail	<u>28</u>	avail	<u>28</u>	insrvc	insrvc	avail	insrvc
0:15	avail		avail		avail	<u>0</u>	avail	<u>28</u>	insrvc	insrvc	avail	insrvc
0:30	avail		avail		avail	Q	avail	<u>28</u>	insrvc	insrvc	avail	insrvc
0:45	avail		avail		avail	<u>0</u>	avail	<u>28</u>	insrvc	insrvc	avail	insrvc
1:00	avail		avail		avail	<u>0</u>	avail	<u>28</u>	insrvc	insrvc	avail	insrvc
1:15	avail		insrvc	Level Control	avail	<u>0</u>	avail	<u>28</u>	insrvc	insrvc	avail	insrvc
1:30	avail		insrvc	Level Control	avail	<u>0</u>	avail	<u>28</u>	insrvc	insrvc	avail	insrvc
1:45	avail		insrvc	Level Control	avail	Q	avail	<u>28</u>	insrvc	insrvc	avail	insrvc
2:00	avail		insrvc	Level Control	avail	<u>0</u>	avail	<u>28</u>	insrvc	insrvc	avail	insrvc
2:15	avail		insrvc	Level Control	avail	<u>0</u>	avail	<u>28</u>	insrvc	insrvc	avail	insrvc
2:30	avail		insrvc	Level Control	avail	<u>0</u>	avail	<u>28</u>	insrvc	insrvc	avail	insrvc
2:45	avail		insrvc	Level Control	avail	<u>0</u>	avail	<u>28</u>	insrvc	insrvc	avail	insrvc
3:00	avail		avail		avail	<u>0</u>	avail	<u>28</u>	insrvc	insrvc	avail	insrvc
3:15	00S		avail		avail	<u>0</u>	avail	<u>28</u>	insrvc	insrvc	avail	insrvc
3:30	005		00S		avail	Q	avail	<u>28</u>	insrvc	insrvc	avail	insrvc
3:45	00S		00S		avail	Ō	avail	<u>28</u>	insrvc	insrvc	avail	insrvc
4:00	005		005		avail	Q	avail	<u>28</u>	insrvc	insrvc	avail	insrvc
4:15	00S		005		avail	<u>0</u>	avail	<u>28</u>	insrvc	insrvc	avail	insrvc
4:30	00S		00S		avail	<u>0</u>	avail	<u>28</u>	insrvc	insrvc	avail	insrvc
4:45	005		005		avail	Q	avail	<u>28</u>	insrvc	insrvc	avail	insrvc
5:00	00S		005	•	avail	<u>0</u>	avail	<u>28</u>	insrvc	insrvc	avail	insrvc

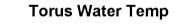
Elapsed Time	COND A	COND B	COND C	FEED A	FEED B	FEED C	A CST Level	B CST Level	RB VENT	RB d/p
-0:15	insrvc	insrvc	insrvc	insrvc	insrvc	insrvc	<u>32</u>	<u>_32</u>	insrvc	0.25_
0:00	insrvc	insrvc	insrvc	insrvc	insrvc	insrvc	32	<u>_32</u>	insrvc	0.25_
0:01	insrvc	insrvc	insrvc	insrvc	005	avail	32	32	isolated	0.25_
0:05	insrvc	insrvc	avail	insrvc	005	avail	32	32	isolated	<u>-0.25</u>
0:15	insrvc	insrvc	avail	insrvc	00S	avail	<u> 32 </u>	<u>32</u>	isolated	<u>-0.25</u>
0:30	insrvc	insrvc	avail	insrvc	005	avail	32	<u>32</u>	isolated	<u>-0.25</u>
0:45	insrvc	insrvc	avail	insrvc	005	avail	32	32	isolated	<u>-0.25</u>
1:00	insrvc	insrvc	avail	insrvc	_ 00S	avail	32	32	isolated	-0.25
1:15	avail	00S	avail	00S	005	00S	32	32	isolated	-0.25
1:30	avail	00S	avail	00S	005	005	32	<u> 32 </u>	isolated	0.25_
1:45	avail	00S	avail	00S	00S	005	32	32	isolated	-0.25
2:00	avail	00S	avail	005	005	005	32	32	isolated	<u>-0.25</u>
2:15	avail	00S	avail	00S	00\$	00S	32	32	isolated	0.25_
2:30	avail	00S	avail	005	005	005	32	32	isolated	0.25_
2:45	avail	oos	avail	005	00S	005	32	32	isolated	0.25_
3:00	insrvc	00S	avail	005	00S	00S	<u> 32 </u>	32	isolated	-0.25
3:15	insrvc	00S	avail	005	005	005	32	32	isolated	-0.25
3:30	insrvc	005	avail	005	00S	00S	<u>32</u>	32	isolated	0.25_
3:45	insrvc	00S	avail	005	00S	005	32	32	isolated	0.25_
4:00	insrvc	005	avail	005	00S	005	32	<u> 32 </u>	isolated	0.25_
4:15	insrvc	00S	avail	005	oos	00S		32	isolated	0.25_
4:30	insrvc	005	avail	005	005	00S	32	32	isolated	-0.25
4:45	insrvc	005	avail	oos	005	00S	32	32	isolated	0.25_
5:00	insrvc	005	avail	005	005	00S	<u>32</u>	32	isolated	0.25_

PLANT PARAMETER SUMMARY



Rx Pressure

Drywell Temp

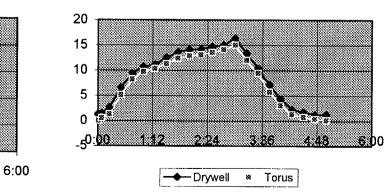


2:24

3:36

4:48





100

80

60

40

20

0:00

1:12

6:00

DURCES 2 SAFEGUARDS 3 RHR

1 AC P	WO	ER SOU	RCES	2	SAFE	GUARDS		3	RI	IR		Node	4	1	CS
UAT		insrvc		<u> </u>				Loo	pA: A	avail				Loop A	\ :
				Rx Trip S	ignal				С	avail					a∨ail
S/U XFI	MR	avail													
				Mode	Run	I								Loop F	
S/D XFI	MR	avail		Switch				Loo	p Flow	<u>0</u> gpm				_	<u>0</u> gpm
		.,													
EDG A		avail		SBLC	A			LOO	pB:B	avail				Loop E	
EDG B		avail		Pumps	D	avail			D	avail					avail
		avan		SBLC TK		300 gal								Loop F	low
BODG		avail				<u>,000 gui</u>		Loo	n Flow	<u>0 g</u> pm				•	<u> 0 g</u> pm
5		PCIS		6			COOL	-4,	WATER						
	quirea		d	RBCCW	Loop	A A	avail	1110	SSW	Loop A	A	avail	<u> </u>		avail
	N	N	= (MSIVs)	Pumps	Toob	В	insrvc	1	Pumps	Loop	В	insrvc			avan
	N	N	(Pri Cont)			С	avail	1		Loop B	D	insrvc			
GP 3	Y	Y	(SDC)		Loop	B D	avail	ļ		•	Е	insrvc			
GP 4	N	N	(HPCI)			Е	avail	i		Swing	С	avail	8		RCIC
GP 5	N	Ν	(RCIC)			F	insrvc						F		avail
GP 6	N	Ν	(RWCU)	TBCCW		A	insrvc	†	Sea Wate	 er		insrvc			
Bypassed	11			Pumps		В	avail	l	Pumps		В	insrvc			
9	RE	CIRC		12	FEED/	COND				CRIT	FICAL	PARAM	ETERS	· · · · · · · · · · · · · · · · · · ·	
Recirc	А	insrvc		Cond	А	insrvc		1			TIN		-0:15		REND 1 ←→↓
Pumps	<u>69.</u>	<u>8</u> % speed	ł	Pumps	В	insrvc		REA	CTOR PC	WER	%		100		\leftrightarrow
					С	insrvc		RPV	/ PRESSU	RE	psi	g	1033		\leftrightarrow
Recirc	А	insrvc		Feed	А	insrvc		RPV	WATER	LEVEL	inc	hes	30		\leftrightarrow
Pumps	<u>69.</u> 8	<u>8</u> % speed		Pumps	В	insrvc		DRY	WELL TE	MP	deį	JF	110		\leftrightarrow
10	Ć	RD			С	insrvc		TOF	RUS WATE	ER TEMP	deç	, F	73		\leftrightarrow
CRD	Α	insrvc		CST Leve	el A	. <u>32</u> ft.		TOR	RUS WATE	R LEVEL	inc	hes	129		\leftrightarrow
Pumps	В	insrvc			В	<u>32</u> ft.		DRY	WELL PR	ESSURE	psi	3	1.30		\leftrightarrow
11	SE	BGT		13	RB V	ENT		TOR	RUS PRES	SURE	psi	3	-0.01		\leftrightarrow
	A	avail			insrva	C			TAIN. H₂		%		0		\leftrightarrow
_	В	avail		RB	d/p <u>-0.</u>	<u>25_</u> inches H	I2O	CON	TAIN. O2	CONC.	%		0		\leftrightarrow

UAT S/U XFMR S/D XFMR	VER SOU insrvc avail avail	IRCES	2 Rx Trip S		GUARDS		3 Loop	RH		1	lode	4	CS
S/U XFMR S/D XFMR	avail		Rx Trip S	Signal			Loop	· ·	- · · - **				
S/D XFMR			Rx Trip 8	Signal									oop A:
S/D XFMR							1	С	avail				avail
	avail		1										
	avail		Mode	Run	1							L	oop Flow:
			Switch				Loop	Flow	<u>0 g</u> pm				gpm
EDG A	avail		SBLC	A	avail		Loop	B: B	avail			La	oop B:
			Pumps	В	avail			D	avail				avail
EDG B	avail												
DODO			SBLC IN	(LVL <u>4</u>	<u>,300_</u> gal			-	•			LC	op Flow:
BODG	avail								0gpm				gpm
5	PCIS		6			COOL		VATER				7	HPCI
Requir			RBCCW	Loop		avail		SSW	Loop A	А	avail		avail
GP1 N	N	(MSIVs)	Pumps		В	insrvc	¦ F	Pumps		В	insrvc		
GP2 N	N	(Pri Cont)			С	avail	i		Loop B	D	insrvc		
GP3 Y	Y	(SDC)		Loop		avail				E	insrvc		
GP4 N	N	(HPCI)			E	avail	1		Swing	С	avail	8	RCIC
GP5 N	N	(RCIC)			FF	insrvc							avail
GP6 N	Ν	(RWCU)	TBCCW		А	insrvc	:	Sea Wate	r	A	insrvc		
Bypassed			Pumps		В	avail		Pumps		В	insrve		
9 R	ECIRC		12	FEED/	COND				CRIT	ICAL I	PARAM	ETERS	
Recirc A	insrvc		Cond	А	insrvc					TIM	IE	0:00	TREND 1 ←→↓
Pumps <u>69</u>) <u>.8</u> % speed	t	Pumps	В	insrvc		REAC	TOR PO	WER	%		100	\leftrightarrow
				С	insrvc		RPV F	RESSU	RE	psię)	1033	\leftrightarrow
Recirc A	insrvc		Feed	А	insrvc		RPV V	VATER L	EVEL	incl	nes	30	↔
Pumps <u>69</u>	0 <u>.8</u> % speed	t	Pumps	В	insrvc		DRYW	ELL TE	ИР	deg	F	110	↔
10	CRD			С	insrvc		TORU	S WATE	R TEMP	deg	F	73	↔
CRD A	insrvc		CST Lev	rel A	. <u>32</u> ft.		TORU	S WATE	RLEVEL	incl	nes	129	\leftrightarrow
Pumps B	insrvc			E	3 <u>32</u> ft.		DRYW	ELL PRI	ESSURE	psig		1.30	↔
11 S	BGT		13	RB V	ENT		TORU	S PRES	SURE	psię		-0.01	↔
A	avail			insrv			CONT	AIN. H ₂ C	CONC.	%		0	↔
В	avail		RB	d/p0.	<u>25_</u> inches ⊢	I₂O	CONT		CONC.	%		0	↔

				FINE 3 99-00A							December	7, 1999			
1 AC P	wo	ER SOL	IRCES	2	SAFE	GUARDS	· · · · ·	3	RH	IR	~	Node		4	CS
UAT		00\$						Lo	op A: A	avail				Loc	op A:
				Rx Trip \$	Signal <u>M</u>	lanual			С	avail					avail
S/U XF	MR	insrvc													
				Mode	S/E)								Loc	pp Flow:
S/D XFN	MR	avail		Switch				Lo	op Flow	<u>0 g</u> pm					gpm
EDG A		insrvc		SBLC	А	avail		Lo	op B: B	avail				Loc	op B:
				Pumps	В	avail			D	avail					avail
EDG B		insrvc													
				SBLC TH	(LVL _4	4 <u>,300_</u> gal								Loc	p Flow:
BODG		avail						Lo	op Flow	<u>0 g</u> pm					0 gpm
5	F	PCIS		6			COOL	ING	WATER					7	HPCI
	quire	<u>d</u> <u>isolate</u>		RBCCW	Loop	A A	avail		SSW	Loop A	А	avail			avail
	Ν	Ν	(MSIVs)	Pumps		В	insrvc				В	insrvc			
	Y	Y	(Pri Cont)			С	avail	Loop B Swing			D	insrvc			
GP 3	Y	Y	(SDC)		Loop	D B D	avail		 		E	insrvc	ſ		
GP 4	N	Ν	(HPCI)			E	avail		 	Swing	С	avail	ſ	8	RCIC
GP 5	N	Ν	(RCIC)			F	insrvc		! [avail
GP 6	Y	Y	(RWCU)	TBCCW		A	insrvc		Sea Wate	r	A	avail			
Bypassed	1 t		Pumps B avai		avail		Pumps		в	avail					
9	RE	CIRC		12	FEED	/COND				CRIT	ICAL I	PARAM	ETER	S	
Recirc	A	avail		Cond	Α	insrvc					TIN		0:01		TREND 1 ←→↓
Pumps	<u>28</u> (% speed		Pumps	В	insrvc		RE	ACTOR PO	WER	%		68		4
					С	insrvc		RP	V PRESSU	RE	psię	3	993	3	¥
Recirc	А	avail		Feed	А	insrvc		RP	V WATER L	EVEL	incl	nes	28		\downarrow
Pumps	<u>28</u> '	% speed		Pumps	в	00S		DR	YWELL TE	ИР	deg	F	106	;	↓
10	С	RD			С	avail		TO	RUS WATE	R TEMP	deg	F	73		↔
CRD	A	insrvc		CST Lev	el A	A <u>32</u> ft.		TO	RUS WATE	R LEVEL	incl		129		↔
Pumps							YWELL PR		psig		1.27		↓		
11	SE	BGT		13		/ENT			RUS PRES		psig		-0.0		¥
	A	avail			isola				NTAIN. H ₂ C		%		0	-+	↔
	В	insrvc		RB		<u>.25_</u> inches H	l ₂ O				%		0		
											• •				17

				FINES 55-00A							December				
	POW	ER SOU	IRCES	2	SAFE	GUARDS		3.	RH	IR	N	lode		4	CS
UAT		00S						Lo	op A: A	avail				Loop A	A:
]				Rx Trip S	Signal <u>M</u>	<u>anual</u>			С	avail					avail
S/U XF	MR	insrvc													
				Mode	S/D									Loop F	Flow:
S/D XF	MR	avail		Switch				Lo	op Flow	<u>0</u> gpm				_	<u> 0 g</u> pm
EDG A		insrvc		SBLC	A	avail		Lo	opB:B	avail				Loop E	
				Pumps	В	avail			D	avail					avail
EDG B		insrvc													
BODO		a			LVL <u>4</u>	<u>,300_</u> gal								Loop F	
BODG		avail							pp Flow					<u></u>	<u>0</u> gpm
5		PCIS		6			COOL	ING	WATER					7	HPCI
	equire			RBCCW	Loop		avail		SSW	Loop A	A	avail			avail
GP 1	N	N	(MSIVs)	Pumps		В	insrvc		Pumps		В	insrvc			
GP 2	Y	Y	(Pri Cont)			С	avail		r 	Loop B	D	insrvc			
GP 3	Y	Y	(SDC)		Loop		avail		4 8 8		E	insrvc			
	Ν	Ν	(HPCI)			E	avail			Swing	С	avail		8	RCIC
GP 5	Ν	Ν	(RCIC)			F	insrvc								avail
	Y	Y	(RWCU)	TBCCW		А	insrvc		Sea Wate	er	A	avail			
Bypasse	d			Pumps		В	avail		Pumps		В	avail			
9	RE	CIRC		12	FEED/	COND				CRIT	ICAL I	PARAM	ETERS	3	
Recirc	А	avail		Cond	A	insrvc					TIM	IE	0:05	٦	REND Î←→↓
Pumps	<u>28</u>	% speed		Pumps	В	insrvc		RE	ACTOR PO	WER	%		3		\downarrow
					С	avail		RP'	V PRESSU	RE	psię	,	935		Ļ
Recirc	А	avail		Feed	А	insrvc		RP	V WATER I	EVEL	incl	nes	29		↑
Pumps	<u>28</u>	% speed		Pumps	В	005		DR	YWELL TE	MP	deg	F	114		1
10	С	RD			С	avail		то	RUS WATE	R TEMP	deg	F	78		↑
CRD	A	insrvc		CST Lev	el A	. <u>32</u> ft.		то	RUS WATE	RLEVEL	inch	ies	129		\leftrightarrow
Pumps	В	insrvc			В	<u>32</u> ft.		DR	WELL PR	ESSURE	psig		1.50		↑
11	SE	IGT		13	RB V	ENT		TO	RUS PRES	SURE	psig		0.50		1
	A	avail			isolat			co	NTAIN. H ₂ (CONC.	%		0		
	В	insrvc		RB	d/p <u>-0.</u>	25_ inches H	₂ O	co	NTAIN. O2	CONC.	%		0		
			I												

EDG A insrvc SBLC A avail Loop B: B avail Loop B: B avail Loop B: avail Loop B: avail avail Itemps B avail Loop B: B avail Loop Flow: D avail Loop Flow: D gpin D gpin Item B: B avail Loop Flow: D gpin D gpin D gpin D gpin D gpin D gpin Item B: B avail Loop Flow: D gpin					PNPS 99-06A							December	7, 1999			
S/U XFMR insrvc Rx Trip Signal Manual C avail avail S/U XFMR avail Mode S/D S/D XFMR avail Switch Loop Flow		OWER	SOU	RCES	2	SAFE	GUARDS		3	RH	R		lode		4	CS
S/U XFMR insrvc Mode S/D S/D XFMR avail Switch Loop Flow gpm gpm EDG A insrvc SBLC A avail Loop B: B avail Loop B: B avail Loop Flow gpm EDG A insrvc SBLC A avail Pumps B avail Loop Flow gpm Loop Flow: gpm BODG avail SBLC TK LVL 4,300 gal Loop Flow gpm Loop Flow: gpm BODG avail SBLC TK LVL 4,300 gal Loop Flow	UAT	00	os						Lo	op A: A	avail				Loop) A:
S/D XFMR avail Mode S/D S/D XFMR avail Switch Loop Flow gpm Loop Flow gpm EDG A insrvc SBLC A avail Loop A A avail Loop Flow gpm Loop Flow gpm EDG B insrvc SBLC TK LVL 4,300 gal Loop Flow gpm Loop Flow gpm BODG avail SBLC TK LVL 4,300 gal Loop Flow gpm Loop Flow					Rx Trip S	Signal <u>M</u>	anual			С	avail			Í		avail
S/D XFMR avail Switch Loop Flow0gpm 0gpm EDG A insrvc SBLC A avail Loop B: B avail Loop B: avail EDG B insrvc SBLC TK LVL _4,300_gal Loop Flow0gpm 0gpm 0gpm BODG avail SBLC TK LVL _4,300_gal Loop Flow0gpm 0gpm 0gpm 5 PCIS 6 COOLING WATER 7 HPCI Required Isolated RBCCW Loop A A avail SSW Loop A A insrvc avail avail GP 1 N N (MSIVs) Pumps B insrvc C avail Loop B D insrvc avail avail GP 3 Y Y (SDC) Loop B D avail Loop B D insrvc avail avail avail GP 4 N N (RCIC) F insrvc Sea Water A avail avail geb 6 Y Y (RWCU) TBCCW A	S/U XFM	IR in	srvc													
EDG A insrvc SBLC A avail Loop B: B avail Loop B: B avail Loop B: avail Loop Flow:					Mode	S/D									Loop	Flow:
EDG B insrvc Pumps B avail D avail Loop Flow0_gpm avail BODG avail SBLC TK LVL _4,300_gal Loop Flow0_gpm 0_gpm 0_gpm 5 PCIS 6 COOLING WATER 7 HPCI Required isolated RBCCW Loop A A avail SSW Loop A A insrvc avail GP 1 N N (MSIVs) Pumps B insrvc Pumps B insrvc avail SSW Loop A A insrvc avail avail GP 1 N N (MSIVs) Pumps B insrvc Pumps B insrvc avail	S/D XFM	lR av	vail		Switch				Lo	pp Flow	<u>0 g</u> pm					gpm
EDG B insrvc Pumps B avail D avail Loop Flow0 _ gpm avail BODG avail SBLC TK LVL _4,300 gal Loop Flow0 _ gpm 0 _ gpm 0 _ gpm 5 PCIS 6 COOLING WATER 7 HPCI Required isolated RBCCW Loop A A avail SSW Loop A A insrvc avail GP 1 N N (MSIVs) Pumps B insrvc Pumps B insrvc avail SSW Loop A A insrvc avail avail GP 1 N N (MSIVs) Pumps B insrvc Pumps B insrvc avail																
EDG B instrvc SBLC TK LVL 4.300 gal Loop Flow0 _ gpm Loop Flow0 _ gpm Loop Flow:0 _ gpm 5 PCIS 6 COOLING WATER 7 HPCI GP 1 N N (MSIVs) (MSIVs) Pumps B instrvc Pumps B instrvc avail GP 1 N N (MSIVs) (MSIVs) Pumps B instrvc Pumps B instrvc Pumps B instrvc avail GP 3 Y Y (PCI) Loop B D avail SSW Loop B D instrvc avail GP 4 N N (HPCI) Loop B D avail Strving C avail GP 5 N N (RWCU) TECCW A instrvc Sea Water A avail gypassed Pumps B avail Pumps B avail Pumps B avail get a valit Pumps B avail Pumps B avail Pumps	EDG A	in	srvc		SBLC	А	avail		Lo	op B: B	avail				Loop	B:
BODG avail SBLC TK LVL 4.300 gal Loop Flow0 _ gpm Loop Flow0 _ gpm 0 _ gpm 5 PCIS 6 COOLING WATER 7 HPCI Required isolated GP 1 N N (MSIVs) (MSIVs) RBCCW Loop A A avail SSW Loop A A instruct avail					Pumps	В	avail			D	avail					avail
BODG avail Loop Flow0 _ gpm 0 _ gpm 5 PCIS 6 COOLING WATER 7 HPCI Required isolated RBCCW Loop A A avail SSW Loop A A insrvc avail avail GP 1 N N (MSIVs) Pumps B insrvc Pumps B insrvc Pumps B insrvc avail avail avail avail avail B insrvc B avail avail B insrvc B avail B avail B Insrvc B In	EDG B	ins	srvc													
5 PCIS 6 COOLING WATER 7 HPCI GP 1 N N (MSIVs) Pumps B insrvc Pumps B insrvc avail SSW Loop A A insrvc avail avail avail GSV Loop A A insrvc avail					SBLC TK	(LVL <u>4</u>	<u>,300_</u> gal								Loop	Flow:
Required isolated RBCCW Loop A A avail SSW Loop A A instruction avail avail avail SSW Loop A A instruction avail avail avail avail SSW Loop A A instruction avail avail </td <td>BODG</td> <td>av</td> <td>/ail</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Lo</td> <td>p Flow</td> <td><u>0 </u></td> <td></td> <td></td> <td></td> <td></td> <td> gpm</td>	BODG	av	/ail						Lo	p Flow	<u>0 </u>					gpm
GP 1 N N (MSIVs) Pumps B insrvc Pumps B insrvc GP 2 Y Y (Pri Cont) Loop B D avail Loop B D insrvc GP 3 Y Y (SDC) Loop B D avail Loop B D insrvc GP 4 N N (HPCl) E avail Swing C avail B insrvc GP 5 N N (RClC) F insrvc Sea Water A avail avail Bypassed	5	PCI	S		6			COOL	ING	WATER					7	HPCI
GP 2 Y Y (Pri Cont) C avail Loop B D instruct GP 3 Y Y (SDC) Loop B D avail E instruct GP 4 N N (HPCI) E avail Swing C avail 8 RCIC GP 5 N N (RCIC) F instruct Sea Water A avail avail Bypassed		uired Is	solated	<u>I</u>	RBCCW	Loop	A A	avail		SSW	Loop A	A	insrvc			avail
GP 3 Y Y (SDC) Loop B D avail E instruct GP 4 N N (HPCI) E avail Swing C avail 8 RCIC GP 5 N N (RCIC) F instruct Sea Water A avail avail avail Bypassed Pumps B avail Pumps B avail Pumps B avail 9 RECIRC 12 FEED/COND CRITICAL PARAMETERS TREND ↑ Recirc A avail Pumps B instruct REACTOR POWER % 3 ↔ Q % speed Pumps B instruct REACTOR POWER % 3 ↔ Recirc A avail Feed A instruct REACTOR POWER % 3 ↔ Recirc A avail Feed A instruct RPV PRESSURE psig 905 ↓ Pumps 28 % speed Pumps B oos DRYWELL TEMP <td></td> <td>1</td> <td>Ν</td> <td>. ,</td> <td>Pumps</td> <td></td> <td>В</td> <td>insrvc</td> <td></td> <td>Pumps</td> <td></td> <td>В</td> <td>insrvc</td> <td></td> <td></td> <td></td>		1	Ν	. ,	Pumps		В	insrvc		Pumps		В	insrvc			
GP 4 N N (HPCI) E avail Swing C avail GP 5 N N (RCIC) F insrvc Sea Water A avail GP 6 Y Y (RWCU) TBCCW A insrvc Sea Water A avail Bypassed Pumps B avail Pumps B avail avail 9 RECIRC 12 FEED/COND CRITICAL PARAMETERS Recirc A avail Pumps B insrvc Pumps 0 % speed Pumps B insrvc REACTOR POWER % 3 Recirc A avail Feed A insrvc REACTOR POWER % 3 Recirc A avail Feed A insrvc REV PRESSURE psig 905 Recirc A avail Feed A insrvc RV WATER LEVEL inches 31 ↑ Pumps 28 % speed Pumps B oos DRYWELL TEMP deg F 127 ↑	1	/	Y	(Pri Cont)			С	avail			Loop B	D	insrvc			
GP 5 N N (RCIC) GP 6 Y Y (RWCU) TBCCW A insrvc Sea Water A avail Bypassed Pumps B avail Pumps B avail avail avail 9 RECIRC 12 FEED/COND CRITICAL PARAMETERS A avail A Recirc A avail Cond A insrvc TIME 0.15 TREND 1 Pumps 0 % speed Pumps B insrvc REACTOR POWER % 3 ↔ Recirc A avail Feed A insrvc REACTOR POWER % 3 ↔ Recirc A avail Feed A insrvc RPV PRESSURE psig 905 ↓ Recirc A avail Feed A insrvc RPV WATER LEVEL inches 31 ↑ Pumps 28 % speed Pumps B oos DRYWELL TEMP deg F 127 ↑	GP3 Y	/	Y	(SDC)		Loop	B D	avail				E	insrvc			
GP 6 Y Y (RWCU) TBCCW A insrvc Sea Water A avail Bypassed Pumps B avail Pumps B insrvc TIME 0:15 TREND ↑ TREND ↑ Pumps 0 % speed Pumps B insrvc REACTOR POWER % 3 ↔ Recirc A avail Feed A insrvc RPV PRESSURE psig 905 ↓ Recirc A avail Feed A insrvc RPV WATER LEVEL inches 31 ↑ Pumps 28 % speed Pumps B oos DRYWELL TEMP deg F 127	GP4 N	1	Ν	(HPCI)			E	avail			Swing	С	avail		8	RCIC
BypassedPumpsBavailPumpsBavail9RECIRC12FEED/CONDCRITICAL PARAMETERSRecircAavailCondAinsrvcPumps $\underline{0}$ % speedCondAinsrvcTIME0:15RecircAavailCondAinsrvcPumps $\underline{0}$ % speedPumpsBinsrvcREACTOR POWER%3RecircAavailFeedAinsrvcRPV PRESSUREpsig905↓RecircAavailFeedAinsrvcRPV WATER LEVELinches31↑Pumps28 % speedPumpsBoosDRYWELL TEMPdeg F127↑10CDDCavailTOBUS WATER LEVELinches31↑	GP5 N	1	Ν	(RCIC)			F	insrvc								avail
9 RECIRC 12 FEED/COND CRITICAL PARAMETERS Recirc A avail Cond A insrvc TIME 0:15 TREND 1← Pumps 0 % speed Pumps B insrvc REACTOR POWER % 3 ↔ Recirc A avail Feed A insrvc REACTOR POWER % 3 ↔ Recirc A avail Feed A insrvc RPV PRESSURE psig 905 ↓ Rumps 28 % speed Pumps B oos DRYWELL TEMP deg F 127 ↑	GP6 Y	/	Y	(RWCU)	TBCCW		A	insrvc		Sea Wate	r	A	avail			
Recirc A avail Cond A insrvc TIME 0:15 TREND 1← Pumps 0 % speed Pumps B insrvc REACTOR POWER % 3 ↔ Recirc A avail Feed A insrvc RPV PRESSURE psig 905 ↓ Pumps 28 % speed Pumps B oos DRYWELL TEMP deg F 127 ↑	Bypassed				Pumps		В	avail		Pumps		В	avail			
RecircAavailCondAinsrvcTIME $0:15$ TREND $\uparrow \leftarrow$ Pumps $\underline{0}$ % speedPumpsBinsrvcREACTOR POWER%3 \leftrightarrow RecircAavailFeedAinsrvcRPV PRESSUREpsig905 \downarrow Pumps <u>28</u> % speedPumpsBoosDRYWELL TEMPdeg F127 \uparrow	9	RECIF	२८		12	FEED	COND				CRIT	ICAL	PARAM	ETERS	;	
C avail RPV PRESSURE psig 905 ↓ Recirc A avail Feed A insrvc RPV WATER LEVEL inches 31 ↑ Pumps 28 % speed Pumps B oos DRYWELL TEMP deg F 127 ↑	Recirc	A a	vail		Cond	A	insrvc		1							TREND ↑ ← →↓
Recirc A avail C avail RPV PRESSURE psig 905 ↓ Pumps 28 % speed Feed A insrvc RPV WATER LEVEL inches 31 ↑ Pumps 28 % speed Pumps B oos DRYWELL TEMP deg F 127 ↑	Pumps	<u>0</u> % spe	eed		Pumps	в	insrvc		RE	ACTOR PO	WER	%		3		↔
Pumps 28 % speed Pumps B oos DRYWELL TEMP deg F 127 10 CDD C avail TOPUS MATER TEMP deg F 127						С	avail		RP	PRESSUP	RE	psig	3	905		
Pumps 28 % speed Pumps B oos DRYWELL TEMP deg F 127 ↑ 10 CDD C Svail TOPUS MATER TEMP deg F 127 ↑	Recirc	A a	vail		Feed	А	insrvc		RP	WATER L	EVEL	incl	nes	31		
	Pumps	<u>28</u> % sp	beed		Pumps	В	00S		DR	WELL TEN	ЛР	deg	F	127		
	10	CRD				С	avail		то	RUS WATE	R TEMP			78		
CRD A insrvc CST Level A 32_ft. TORUS WATER LEVEL inches 130 ↑					CST Lev	el A	<u>32</u> ft.									
Pumps B insrvc B 32 ft. DRYWELL PRESSURE psig 2.66	Pumps	B in	isrvc					i								
11 SBGT 13 RB VENT TORUS PRESSURE psig 1.26 ↑	11	SBGT	Γ		13	RB V	ENT		то	RUS PRESS	SURE					
A avail isolated CONTAIN. H₂ CONC. % 0 ↔		A av	vail			isolat	ed		со	NTAIN. H₂ C	ONC,	%		0		
B insrvc RB d/p <u>-0.25</u> inches H ₂ O CONTAIN. O ₂ CONC. % 0 \leftrightarrow		B in	ISTVC		RB	d/p <u>-0.</u>	25_ inches H	₂ O	co	NTAIN. O2 C	CONC.	%		0		······

December 7, 1999

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				PNPS 99-06A									•		
1 AC P	OWE	R SOU	IRCES	2	SAFE	GUARDS		3	RH	IR		Node	4	4	CS
UAT		00S						Lo	op A: A	insrvc		· · · · · · · · · · · · · · · · · · ·		Loop	DA:
				Rx Trip \$	Signal <u>M</u>	lanual			С	insrvc					avail
S/U XFN	1R	insrvc									Tor	us Cooling			
				Mode	S/E)								Loop	Flow:
S/D XFN	IR	avail		Switch				Lo	op Flow <u>4</u>	<u>900 g</u> pm					gpm
EDG A		insrvc		SBLC	А	avail		Lo	opB:B	insrvc				Loop	о В:
				Pumps	В	avail			D	insrvc					avail
EDG B		insrvc									Tor	us Cooling			
				SBLC TH	< LVL _4	4 <u>,300_</u> gal								Loop	Flow:
BODG		avail						Lo	op Flow <u>4,9</u>	<u>900_</u> gpm					0 gpm
5	P	CIS		6			COOL	ING	WATER				7	7	HPCI
Reg	uired	Isolate	<u>d</u>	RBCCW	Loop	DA A	insrvc		SSW	Loop A	А	insrvc			avail
GP1 N	N	Y	(MSIVs)	Pumps		В	insrvc		Pumps		В	insrvc			
GP 2)	(Y	(Pri Cont)			С	avail		1 1	Loop B	D	insrvc			
GP 3 Y	(Y	(SDC)		Loop	B D	avail		l I		Е	insrvc			
GP4 N	١	Ν	(HPCI)			E	insrvc		1	Swing	С	avail	8	3	RCIC
GP 5 N	١	Ν	(RCIC)			F	insrvc		 				F		avail
GP6 Y	(Y	(RWCU)	TBCCW		A	insrvc		Sea Wate			avail			
Bypassed				Pumps		В	avail		Pumps		В	avail			
9	REC	RC		12 FEED/COND					CRITICAL PARAMET					;	
Recirc	А	avail		Cond	A	insrvc				******	TIN		0:30		TREND 1←→↓
Pumps	<u>0</u> % s	speed		Pumps	В	insrvc		RE	ACTOR PO	WER	%		2		↓
					С	avail		RP	V PRESSU	RE	psi	3	803		↓
Recirc	А	avail		Feed	А	insrvc		RP	V WATER L	EVEL	inc	nes	30		↓
Pumps	<u>28</u> %	speed		Pumps	В	00S		DR	YWELL TE	MP	deg	F	187		1
10	CR	D			С	avail		ТО	RUS WATE	R TEMP	deg	F	84		↑
CRD	A	insrvc		CST Lev	el /	A <u>32</u> ft.		то	RUS WATE	RLEVEL	incl	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	131		↑
Pumps	в	insrvc				3 <u>32</u> ft.			YWELL PRI		psig		6.6		<u>`</u>
11	SBO	GT		13	RB V	/ENT		то	RUS PRES	SURE	psig		5.1		↑ ↑
	A	avail						CONTAIN. H ₂ CONC.			% 0		0		↔ 、
	В	insrvc		RB	d/p <u>-0</u>	.25_ inches H	H₂O	со	NTAIN. O2 (CONC.	%		0	+	\leftrightarrow

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				PNPS 99-06A							Decembe	7,1999		·
	OWE	ER SOU	IRCES	2	SAFE	GUARDS		3	Rł	IR		Mode	4	CS
UAT		005						Loo	рА: А	insrvc		****	L	Loop A:
				Rx Trip	Signal <u>M</u>	lanual			С	insrvc				avail
S/U XFN	MR	insrvc									Tor	us Cooling	9	
				Mode	S/D)								.oop Flow:
S/D XFN	ИR	avail		Switch				Loo	pFlow 🟒	1900gpm				<u> 0 g</u> pm
										····				
EDG A		insrvc		SBLC	А	avail		Loo	рВ: В	insrvc			Ĺ	loop B:
				Pumps	В	avail			D	insrvc				avail
EDG B		insrvc									Tor	us Cooling	J	
				SBLC TI	< LVL <u>4</u>	<u>,300</u> gal							L	.oop Flow:
BODG		avail						Loo	p Flow <u>4,</u>	<u>900_</u> gpm				0 gpm
5	P	CIS		6			COOL	ING	WATER	·			7	HPCI
Rec	quired	Isolate	<u>d</u>	RBCCW	Loop	A A	insrvc	I I	SSW	Loop A	А	insrvc		avail
GP 1	N	Y	(MSIVs)	Pumps		В	insrvc	1	Pumps		в	insrvc		
GP 2	Y	Y	(Pri Cont)			С	avail	1		Loop B	D	insrvc		
GP 3	Y	Y	(SDC)		Loop	B D	avail	1			Е	insrvc		
GP4	N	N	(HPCI)			Е	insrvc			Swing	С	avail	8	RCIC
GP 5	N	Ν	(RCIC)			F	insrvc							avail
GP 6	Y	Y	(RWCU)	TBCCW		A	insrvc		Sea Wate		A	avail		
Bypassed	<u>ا</u>			Pumps		В	avail	1	Pumps		В	avail	ł	
9	RE	CIRC		12 FEED/COND						CRIT	ETERS			
Recirc	А	avail		Cond	A	insrvc					TIN		0:45	TREND 1 ←→↓
Pumps	<u>0</u> %	speed		Pumps	В	insrvc		REA	CTOR PO	WER	%		1	↓
4 2					С	avail		RPV	PRESSU	RE	psi	g	707	
Recirc	А	avail		Feed	А	insrvc		RPV	WATER I	EVEL	inc	hes	30	↔
Pumps	<u>28</u> %	6 speed		Pumps	В	00S		DRY	WELL TE	MP	deį) F	214	1
10	CI	RD	· · · · · · · · · · · · · · · · · · ·		С	avail		TOR	US WATE	R TEMP	deį	J F	88	↑
CRD	Α	insrvc		CST Lev	vel A	∖ <u>32</u> ft.		TOR	US WATE	RLEVEL		hes	131	↔
Pumps	в	insrvc			E	3 <u>32</u> ft.		DRY	WELL PR	ESSURE	psi		9.3	↑ ↑
11	SB	GT		13	RB V	ENT		TOR	US PRES	SURE	psi		8.2	↑ ↑
	A	avail			isola	ied		CON	ITAIN. H ₂ (CONC.	%		0	↔
	В	insrvc				.25_ inches H	-		ITAIN. O2		%		0	

1 AC P	OWE	R SOU	IRCES	2	SAFE	GUARDS		3	RH	IR		Node	4	.C	5
UAT		00S						Loop A	: A	insrvc			l	_oop A:	
				Rx Trip S	Signal <u>M</u>	anual			С	insrvc				a	/ail
S/U XFN	1R	insrvc									Tor	us Coolin	g		
				Mode	S/D)								_oop Flow:	
S/D XFN	1R	avail		Switch				Loop F	low	<u>1900 g</u> pm				0	gpm
EDG A		insrvc		SBLC	А	avail		Loop B	: В	insrvc				_oop B:	
				Pumps	В	avail			D	insrvc				•	/ail
EDG B		insrvc									Tor	us Cooling	a		
				SBLC TK	(LVL <u>4</u>	<u>,300</u> gal							· .	.oop Flow:	
BODG		avail						Loop F	low,	<u>900_</u> gpm				0	gpm
5	Ρ	CIS		6			COOL	ING W	ATER				7	HP	
Req	uired	Isolate	d	RBCCW	Loop	A A	insrvc	¦ SS	SW	Loop A	A	insrvc		ava	il
GP1 N	N	Y	(MSIVs)	Pumps		В	insrvc	ן Pi	imps		в	insrvc			
GP 2)	(Y	(Pri Cont)			С	avail	 		Loop B	D	insrvc			
GP 3)	(Y	(SDC)		Loop	B D	avail	l I			Е	insrvc			
GP4 N	N	N	(HPCI)			E	insrvc			Swing	С	avail	8	RC	С
GP5 N	1	Ν	(RCIC)			F	insrvc	1						ava	il
GP6 Y	1	Y	(RWCU)	TBCCW		A	insrvc	Se	a Wate	er	A	avail			
Bypassed				Pumps		В	avail	¦ Ρι	imps		В	avail			
9	RE	CIRC		12	FEED	COND		CRITICAL PARAMETE							
Recirc	А	avail		Cond	А	insrvc					TIN	1E	1:00	TRE	ND ↑←→↓
Pumps	<u>0</u> %	speed		Pumps	В	insrvc		REACT	OR PO	WER	%		1		\leftrightarrow
					С	avail		RPV PF	RESSU	RE	psi	3	567		Ļ
Recirc	А	avail		Feed	А	insrvc		RPV W	ATER	_EVEL	inc	nes	30		\leftrightarrow
Pumps	<u>28</u> %	6 speed		Pumps	В	00S		DRYW	ELL TE	MP	deg	F	222		1
10	CF	RD			С	avail		TORUS	WATE	R TEMP	deg	F	92	-	↑
CRD	А	insrvc		CST Lev	el A	A <u>32</u> ft.		TORUS	WATE	RLEVEL	inc	nes	130		+
Pumps	В	insrvc			E	3 <u>32</u> ft.		DRYW	ELL PR	ESSURE	psi	,	10.7		1
11	SB	GT		13	RB V	ENT		TORUS	PRES	SURE	psi	, ,	9.7		1
	A	avail			isolat	ed		CONTA	IN. H₂ (CONC.	%	_	0		\leftrightarrow
	В	insrvc		RB	d/p <u>-0</u> .	25_ inches H	₂ O	CONTA	IN. O ₂ (CONC.	%		0	-	\leftrightarrow

				FNF3 99-00A							December	1, 1000		•
	WO	ER SOU	IRCES	2	SAFE	GUARDS		3	RH	IR		Node	4	CS
UAT		005						Loop A	: A	insrvc			L	pop A:
				Rx Trip S	Signal <u>M</u>	anual			С	insrvc				avail
S/U XFI	MR	insrvc									Tor	us Cooling		
				Mode	S/D								Lo	oop Flow:
S/D XFI	MR	avail		Switch				Loop Fl	ow	<u>900 g</u> pm				<u>0</u> gpm
EDG A		insrvc		SBLC	А	avail		Loop B	: В	insrvc		- # = # = + = # # = = = = .	 (
				Pumps	В	avail			. D	insrvc				avail
EDG B		insrvc		i unipo	5	urun				115140	Tor	us Cooling		avan
				SBLC TK	LVL 4	, <u>300</u> gal					101			oop Flow:
BODG		avail				<u></u> 9		Loop FI	ow 4,	<u>900_</u> gpm				0 gpm
5 PCIS			6			COOL		ATER				7	HPCI	
	quirec		<u>d</u>	RBCCW	Loop	A A	insrvc	ور بيد وي ورو بين اين بيا بيا بيا بيا و	W	Loop A	A	insrvc		avail
GP 1	N	Y	(MSIVs)	Pumps		В	insrvc	¦ Pu	mps	•	В	insrvc		
GP 2	Y	Y	(Pri Cont)			С	avail	i		Loop B	D	insrvc		
GP 3	Y	Y	(SDC)		Loop	B D	avail	i I			Е	insrvc		
GP 4	N	Ν	(HPCI)			Е	insrvc	1		Swing	С	avail	8	RCIC
GP 5	N	Ν	(RCIC)			F	insrvc							insrvc
GP 6	Y	Y	(RWCU)	TBCCW		A	insrvc	Se	a Wate	er	A	avail		Level Control
Bypassed	1			Pumps		В	avail	¦ Pu	mps		В	avail		
9	RE	CIRC		12	COND									
Recirc	А	avail		Cond	А	avail					TIN	1E	1:15	TREND ↑←→↓
Pumps	<u>0</u> %	speed		Pumps	В	00S		REACT	OR PO	WER	%		1	\leftrightarrow
					С	avail		RPV PR	ESSU	RE	psi)	446	↓
Recirc	А	avail		Feed	А	00S		RPV W	ATER L	EVEL	inc	nes	20	↓
Pumps	<u>28</u> %	% speed		Pumps	В	00S		DRYWE		MP	deg	F	224	1
10	CI	RD			С	00S		TORUS	WATE	R TEMP	deg	F	95	<u>↑</u>
CRD	A	insrvc		CST Lev	el A	<u>32</u> ft.		TORUS	WATE	RLEVEL	incl	nes	130	\leftrightarrow
Pumps	в	insrvc			E	3 <u>2</u> ft.		DRYWE	LL PR	ESSURE	psi	;	11.1	↑
11	SB	GT		13	RB V	ENT		TORUS	PRES	SURE	psig		10.3	<u>↑</u>
	А	avail			isolat	ed		CONTA	N. H₂ (CONC.	%		0	↔
	В	insrvc		PB	d/n 0	25_ inches H		CONTA		CONIC	%		0	\leftrightarrow

В

insrvc

	WER SOU	IRCES	2	SAFE	GUARDS		3	R	IR		Mode	4	4	CS s
UAT	005						Loo	pA: A	insrvc				Loop A:	
			Rx Trip S	ignal <u>Ma</u>	anual			С	insrvc					avail
S/U XFMF	R insrvc									То	rus Coolin	g		
			Mode	S/D			1						Loop Fl	ow:
S/D XFMF	R avail		Switch				Loo	p Flow	<u>4900 g</u> pm					<u>0 gpm</u>
												-		
EDG A	insrvc		SBLC	А	avail		Loo	pB:B	insrvc				Loop B:	
			Pumps	В	avail			D	insrvc					avail
EDG B	insrvc									То	rus Cooling	g		
			SBLC TK	LVL <u>4</u> ,	<u>300_</u> gal								Loop Fl	ow:
BODG	avail						Loo	p Flow <u>4</u> ,	<u>900_</u> gpm					gpm
5	PCIS		6			COOL	ING	WATER				7	7 H	IPCI
<u>Requ</u>	<u>ired</u> Isolate	d	RBCCW	Loop	A A	insrvc	I I	SSW	Loop A	А	insrvc			avail
GP1 N	Y	(MSIVs)	Pumps		В	insrvc	1	Pumps		В	insrvc			
GP 2 Y	Y	(Pri Cont)			С	avail	1		Loop B	D	insrvc			
GP 3 Y	Y	(SDC)		Loop	B D	avail	1			Ε	insrvc	ĺ		
GP4 N	N	(HPCI)			E	insrvc	1		Swing	С	avail	1	3 F	RCIC
GP 5 N	N	(RCIC)			F	insrvc							i	nsrvc
GP 6 Y	Y	(RWCU)	TBCCW		A	insrvc	+ 	Sea Wat	er	A	avail		Leve	I Control
Bypassed _	<u> </u>		Pumps		В	avail	1	Pumps		В	avail			
9	RECIRC		12	FEED/	COND		CRITICAL PARAMET					ETERS		
Recirc	A avail		Cond	А	avail						ME	1:30		
Pumps	<u>0</u> % speed		Pumps	в	00S		REA	CTOR PC	WER	%	-	1		\leftrightarrow
				С	avail		RPV	PRESSU	RE	ps	ig	370		
Recirc	A avail		Feed	А	005		RPV	WATER	LEVEL		ches	10		+
Pumps	<u>28</u> % speed		Pumps	В	00S		DRY	WELL TE	MP		g F	228		↑
10	CRD		-	С	00S		TOR	US WATE	ER TEMP		g F	94	_	 ↓
CRD /	A insrvc		CST Leve	el A	<u>32</u> ft.		TOR	US WATE	ER LEVEL	inc	hes	130		↔
Pumps I	B insrvc			В	<u>32</u> ft.		DRY	WELL PR	ESSURE	ps	ig	12.5		↑
11	SBGT 13		13	RB V	ENT	-	TOR	US PRES	SURE	ps		11.3		↑
/	A avail			isolate	ed		CON	ITAIN. H ₂	CONC.	%		0		↔
,	n													

CONTAIN. O2 CONC.

RB d/p _-0.25_ inches H₂O

%

0

 \leftrightarrow

			· · · · · · · · · · · · · · · · · · ·	FNF3 99-00A							December			
	woy	ER SOU	RCES	2	SAFE	GUARDS		3		HR		Node	4	CS
UAT		005						Loop	DA: A	insrvc			L	pop A:
				Rx Trip S	ignal <u>M</u>	<u>anual</u>			С	insrvc				avail
S/U XFI	MR	insrvc									Tor	us Coolin	g	
				Mode	S/D								L	pop Flow:
S/D XFI	MR	avail		Switch				Loop	o Flow	<u>4900 g</u> pm				0 gpm
EDG A		insrvc		SBLC	А	avail		Loop	DB: B				L	pop B:
				Pumps	В	avail			D	insrvc				avail
EDG B		insrvc									Tor	us Coolin	~ I	
				SBLC TK	LVL <u>4</u>	<u>,300_</u> gal								pop Flow:
BODG		avail						1	o Flow _4	<u>,900_</u> gpm				0 gpm
5	F	PCIS		6			COOL	ING	WATE	2			7	HPCI
	quire	<u>d</u> <u>Isolate</u>	_	RBCCW	Loop	A A	insrvc		SSW	Loop A	А	insrvc		avail
	Ν	Y	(MSIVs)	Pumps		В	insrvc	1	Pumps		В	insrvc		
	Y	Y	(Pri Cont)			С	avail			Loop B	D	insrvc		
	Y	Y	(SDC)		Loop	B D	avail				Е	insrvc		
GP 4	Ν	Ν	(HPCI)			E	insrvc	1		Swing	С	avail	8	RCIC
GP 5	N	N	(RCIC)			F	insrvc	I I						insrvc
GP 6	Y	Y	(RWCU)	TBCCW		A	insrvc	-	Sea Wa	er	A	avail		Level Control
Bypassed	d t			Pumps		В	avail	 	Pumps		В	avail		
9	RE	CIRC		12 FEED/COND					CRITICAL PARAMETE					
Recirc	Α	avail	,	Cond	А	avail					TIN	ΛE	1:45	TREND 1 ← →↓
Pumps	<u>0</u> %	speed		Pumps	В	00S		REA	CTOR P	OWER	%		1	\leftrightarrow
					С	avail		RPV	PRESSI	JRE	psi	g	309	↓ ↓
Recirc	А	avail		Feed	А	00S		RPV	WATER	LEVEL	inc	hes	10	\leftrightarrow
Pumps	<u>28</u> '	% speed		Pumps	В	005		DRY	WELL TE	EMP	deg	j F	234	<u>↑</u>
10	C	RD			С	00S		TOR	US WAT	ER TEMP	deg	ј F	93	↓ ↓
CRD	A	insrvc		CST Lev	el A	. <u>32</u> ft.		TOR	US WAT	ER LEVEL	inc	hes	129	↓ ↓
Pumps	в	insrvc				3 <u>32</u> ft.		DRY	WELL P	RESSURE	psi		13.7	↑ ↑
11	SE	BGT		13	RB V	ENT	• •••	TOR	US PRE	SURE	psi	-	12.4	<u>↑</u>
		avail			isolat		···· ·	CON	TAIN, H ₂	CONC.	%	-	0	↔
	в	insrvc		RB		25_inches	H,O		TAIN. U2		%		0	\leftrightarrow
				1.0	P			L					-	<u> </u>

1 AC POWER SC	URCES	2 SAI	EGUARDS		3	RH	R	N	lode	4	CS
UAT oos			********		Loo	pA: A	insrvc			L	op A:
		Rx Trip Signa	l <u>Manual</u>			С	insrvc				avail
S/U XFMR insrvo	;							Toru	ıs Cooling	g	
		Mode S	S/D							La	op Flow:
S/D XFMR avail		Switch			Loo	p Flow <u>4</u>	<u>900 g</u> pm				0gpm
EDG A insrvo		SBLC A	A avail			рВ: В	insrvc				op B:
	,		avail			р. D. D.	insrvc				avail
EDG B insrvo						D	113140	Toru	is Cooling	- I	avan
		SBLC TK LVL	4.300 gai					1010	io ooonng	-	op Flow:
BODG avail			g		Loo	p Flow _4,9	00 gpm				gpm
5 PCIS		6		COOL	1	WATER		······		7	HPCI
Required Isola	ted	RBCCW La	oop A A	insrvc		SSW	Loop A	A	insrvc		avail
GP1 N Y	(MSIVs)	Pumps	В	insrvc	1 	Pumps	-	в	insrvc		
GP2YY	(Pri Cont)		С	avail	1		Loop B	D	insrvc		
GP3Y Y	(SDC)	Lo	оор В С	avail	1			Е	insrvc		
GP4 N N	(HPCI)		E	insrvc	1		Swing	С	avail	8	RCIC
GP5NN	(RCIC)		F	insrvc	1						insrvc
GP6YY	(RWCU)	TBCCW	A	insrvc	+ 	Sea Wate	r	A	avail		Level Control
Bypassed	-	Pumps	В	avail	1	Pumps		В	avail		
9 RECIRC		12 FEE	D/COND	CRITICAL PARAMETE					ETERS		
Recirc A avail		Cond A	avail					TIM	E	2:00	TREND 1 ←→↓
Pumps <u>0</u> % speed		Pumps B	00S		REA	CTOR PO	WER	%		1	↔
		С	avail		RPV	PRESSUP	RE	psig		248	\downarrow
Recirc A avail		Feed A	00S		RPV	WATER L	EVEL	inch	es	10	\leftrightarrow
Pumps 28 % speed	i	Pumps B	00S		DRY	WELL TEN	ЛР	deg	F	236	1
10 CRD		c	005		TOF	US WATE	R TEMP	deg	F	92	↓
CRD A insrv	0	CST Level	A <u>32</u> ft.		TOF	US WATE	R LEVEL	inch	es	129	↔
Pumps B insrv	5		B <u>32</u> ft.		DRY	WELL PRE	ESSURE	psig		14.1	↑
11 SBGT		13 RE	VENT	,	TOR	US PRESS	SURE	psig		12.9	1
A avail		iso	plated		CONTAIN. H2 CONC.			%		0	\leftrightarrow
B insrv	2	RB d/p	<u>-0.25</u> inches H	l₂O	CON		ONC.	%		0	\leftrightarrow

				PNPS 99-06A							December	7,1999			
.1 AC P	wo	ER SOU	IRCES	2	SAFE	GUARDS		3	RH	IR	1	Node		4	CS
UAT		00S						Loo	pA: A	insrvc				Loop	A:
				Rx Trip S	Signal <u>M</u>	lanual			С	insrvc			ĺ		avail
S/U XFN	MR	insrvc									Tor	us Cooling	g		
				Mode	S/D)								Loop	Flow:
S/D XFN	MR	avail		Switch				Loo	p Flow <u>4</u>	<u>.900 gpm</u>					0 gpm
EDG A		insrvc		SBLC	А	avail			рВ: В	insrvc				Loop	 R [,]
LDON		113140		Pumps	В				р <u>р</u> . D	insrvc				LOOP	avail
EDG B		insrvc			U	avan			D	11131 40	Tor	us Cooling			avali
2000						. <u>300 g</u> al					100		9	Loon	Flow:
BODG		avail				<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>		100	p Flow4	000 anm				-	gpm
5	P	CIS		6			COOL		WATER					7	HPCI
	quirec		d	RBCCW	Loop	A A	insrvc		SSW	Loop A	A	insrvc			avail
GP 1	N	Y	 (MSIVs)	Pumps	•	В	insrvc	i	Pumps		В	insrvc			
GP 2	Y	Y	(Pri Cont)			С	avail		•	Loop B	D	insrvc			
GP 3	Y	Y	(SDC)		Loop	B D	avail				Е	insrvc			
GP 4	N	Ν	(HPCI)			E	insrvc	i		Swing	С	avail	ŀ	8	RCIC
GP 5	N	N	(RCIC)			F	insrvc	ļ					ŀ	<u> </u>	insrvc
GP 6	Y	Y	(RWCU)	TBCCW		A	insrvc	÷	Sea Wate	r		avail		Le	vel Control
Bypassed	1 ł			Pumps		В	avail	i	Pumps		в	avail			
9	RE	CIRC		12	FEED	/COND				CRIT	ICAL	PARAM	ETER	S	
Recirc	A	avail		Cond	A	avail					TIN	1E	2:15	;	TREND ↑ ← →↓
Pumps	<u>0</u> %	speed		Pumps	В	00S		REA	CTOR PO	WER	%		1		\leftrightarrow
					С	avail		RPV	PRESSU	RE	psi	3	208		↓
Recirc	А	avail		Feed	А	00S		RPV	WATER L	EVEL	inc	nes	10		↔
Pumps	<u>28</u> 9	% speed		Pumps	В	00S		DRY	WELL TE	MP	deg	F	239		<u>↑</u>
10	C	RD			С	00S		TOR	US WATE	R TEMP	deg	F	91		+
CRD	А	insrvc		CST Lev	el A	A <u>32</u> ft.		TOR	US WATE	R LEVEL	incl	nes	129		↔
Pumps	в	insrvc			E	3 <u>32</u> ft.		DRY	WELL PR	ESSURE	psię	,	14.2		<u> </u>
11	SE	GT		13	RB V	'ENT		TOR	US PRES	SURE	psię	3	13.1		1
	A	avail			isolat	led		CON	ITAIN. H ₂ C	CONC.	%		0		\leftrightarrow
	В	insrvc		PB	d/n 0	25 inches H	~	001			%		0		

(/ \			PNPS 99-06A			$\left(\right)$				Decembe	r 7 1999			(
1 AC F	POWE	R SOU		2	SAFE	GUARDS		3	RH			Mode		4	CS
UAT		005						Loop A:	Α	insrvc				Loc	р А:
				Rx Trip :	Signal <u>M</u>	anual			С	insrvc					avail
S/U XFI	MR	insrvc									Тог	rus Cooling	g		
				Mode	S/D									Loo	p Flow:
S/D XFI	MR	avail		Switch				Loop Flov	/4	<u>900 g</u> pm					gpm
EDG A		insrvc		SBLC	А	avail		Loop B:	В	insrvc				Loo	рВ:
				Pumps	в	avail			D	insrvc					avail
EDG B		insrvc									Tor	us Cooling	,		
				SBLC TH	< LVL _4	, <u>300</u> gal								Loo	p Flow:
BODG		avail						Loop Flow	4,9	<u>00_</u> gpm					0 gpm
5	Р	CIS		6			COOLI	NG WAT	ER			· .		7	HPCI
Re	quired	Isolate	<u>d</u>	RBCCW	Loop	A A	insrvc	SSW		Loop A	A	insrvc			avail
GP 1	Ν	Y	(MSIVs)	Pumps		В	insrvc	¦ Pum	ps		В	insrvc			
GP 2	Y	Y	(Pri Cont)			С	avail	1		Loop B	D	insrvc			
GP 3	Y	Y	(SDC)		Loop	B D	avail	1			Е	insrvc			
GP 4	Ν	N	(HPCI)			E	insrvc	l T		Swing	С	avail	ľ	8	RCIC
GP 5	Ν	Ν	(RCIC)			F	insrvc						ľ		insrvc
GP 6	Y	Y	(RWCU)	TBCCW		A	insrvc	Sea	Nate	r	A	avail		L	evel Control
Bypassed	d			Pumps		В	avail	Pum	os		В	avail			
9	RE	CIRC		12	FEED	COND				CRIT	ICAL	PARAM	ETER	S	
Recirc	А	avail		Cond	А	avail					TI	ME	2:30)	TREND 1 ←→↓
Pumps	<u>0</u> %	speed		Pumps	В	00S		REACTOR	R PO	WER	%		1		\leftrightarrow
					С	avail		RPV PRE	SSUF	RE	psi	g	182	2	Ļ
														-	

Recirc A

Pumps

CRD

Pumps

10

11

avail

insrvc

insrvc

avail

insrvc

28 % speed

CRD

SBGT

Α

в

А

в

Feed

13

Pumps

CST Level

А

в

С

00S

00S

00S

A <u>32</u> ft.

B<u>32</u>ft.

RB VENT

RB d/p $_-0.25$ inches H₂O

isolated

RPV WATER LEVEL

TORUS WATER TEMP

TORUS WATER LEVEL

DRYWELL PRESSURE

TORUS PRESSURE

CONTAIN. H2 CONC.

CONTAIN. O2 CONC.

DRYWELL TEMP

10

242

91

129

14.6

13.5

0

0

 \leftrightarrow

1

 \leftrightarrow

 \leftrightarrow

1

1

 \leftrightarrow

 \leftrightarrow

inches

deg F

deg F

inches

psig

psig

%

%

4 401				0	CAFE			12			Devenibe			
	PUW	ER SOL	IRGES	2	SAFE	GUARDS		3	RH			Mode	4	الناجاني مستعدي بيبين بمستحصين فاسترعه مستحسين والم
UAT		005			<u>.</u>			LO	op A: A	insrvc				Loop A:
	-			Rx Trip	Signal <u>N</u>	<u>ianual</u>			С	insrvc	_	• "		avail
S/U XF	-MK	insrvc			e /=						Tor	us Cooling		
				Mode	S/E)								_oop Flow:
S/D XF	-MR	avail		Switch				Loc	op Flow <u>4</u>	<u>900 g</u> pm				<u> 0 g</u> pm
EDG A	N	insrvc		SBLC	A	avail		Loc	op B: B	insrvc				loop B:
				Pumps	В	avail			D	insrvc	_			avail
EDG B	5	insrvc									Tor	us Cooling	-	
				SBLC TH	< LVL _4	<u>4,300_</u> gal							L	_oop Flow:
BODG		avail							op Flow <u>4,</u>	<u>900_</u> gpm				gpm
5	F	PCIS		6			COOL	ING	WATER				7	HPCI
<u>Re</u>	equired	<u>i isolate</u>	<u>d</u>	RBCCW	Loop	A A	insrvc		SSW	Loop A	A	insrvc		avail
GP 1	Ν	Y	(MSIVs)	Pumps		В	insrvc		Pumps		В	insrvc		•
GP 2	Y	Y	(Pri Cont)			С	avail		1	Loop B	D	insrvc		
GP 3	Y	Y	(SDC)		Loop	D B D	avail		l C		Е	insrvc		
GP 4	Ν	Ν	(HPCI)			Е	insrvc			Swing	С	avail	8	RCIC
GP 5	Ν	Ν	(RCIC)			F	insrvc							insrvc
GP 6	Y	Y	(RWCU)	TBCCW		A	insrvc		Sea Wate	r		avail		Level Control
Bypasse	ed			Pumps		В	avail		Pumps		в	avail		
9	RF	CIRC	••••••	12	FEED	COND				CRI	ΓΙΟΔΙ	PARAM	FTERS	
Recirc	A	avail		Cond	A	avail				0111	TIN		2:45	TREND 1 ←→↓
Pumps		speed		Pumps	В	005		RE	ACTOR PO	WFR	%		1	
	± / •				c	avail			V PRESSU		psi	a +	152	+ +
Recirc	А	avail		Feed	Ā	005		· ·	V WATER L			9 hes	10	↓
Pumps		% speed		Pumps	В	005			YWELL TE					↓ ↓
		-		Fullips			į				de	-	245	T
10		RD			С	00S			RUS WATE		deg	-	92	<u>↑</u>
CRD	A	insrvc		CST Lev		A <u>32</u> ft.			RUS WATE		inc	hes	129	Ļ
Pumps	B	insrvc				B <u>32</u> ft.		DR`	YWELL PR	ESSURE	psi	g	15.0	<u>↑</u>
11	SE	IGT		13	RB \	/ENT		TOF	RUS PRES	SURE	psi	g	14.1	↑
	A	avail			isola	ted		CO	NTAIN. H ₂ (CONC.	%		0	↔
	В	insrvc		RB	d/p <u>-0</u>	.25_ inches H	₂ O	col		CONC.	%		0	↔

1 AC PC	OWE	R SOU	RCES	2	SAFE	GUARDS		3	RH	IR		Node		4	CS
UAT		005						Loop A	Α	insrvc				Loop	A:
				Rx Trip S	Signal <u>M</u>	anual			С	insrvc					avail
S/U XFM	IR	insrvc									Tor	us Cooling)		
				Mode	S/D									Loop	Flow:
S/D XFM	IR	avail		Switch				Loop Fl	ow <u>4</u>	<u>900 g</u> pm					<u> 0 g</u> pm

EDG A		insrvc		SBLC	A	avail		Loop B		insrvc				Loop	
				Pumps	В	avail			D	insrvc	_				avail
EDG B		insrvc				200					Tori	us Cooling			
BODG		avail		SBLUIK	LVL <u>4</u>	<u>,300</u> gal				00 anm				Loop	Flow:
						,				<u>900_</u> gpm					0 gpm
5		CIS		6 RBCCW			COOL		ATER					7	HPCI
GP1 N	uired	<u>Isolatec</u> Y	_		Loop		insrvc		W	Loop A	A	insrvc			avail
GP2 Y		Y	(MSIVs) (Pri Cont)	Pumps		B C	insrvc avail	l Pu	mps	Loop D	B	insrvc			
GP3 Y		Y	(FILCOIII) (SDC)		Loop		avail	I		Loop B	D	insrvc			
GP4 N		N	(HPCI)		Loop	E	insrvc			Curing	E	insrvc	-		
								l		Swing	С	avail	_	8	RCIC
		N	(RCIC)	TBCCW		F	insrvc	+							avail
		Y	(RWCU)			A	insrvc		a Wate	r	A	avail			
Bypassed				Pumps		B	avail		mps		B	avail			
9		CIRC				COND				CRIT		PARAM			
Recirc	A	avail		Cond	A	insrvc		DELOT				1E	3:00		TREND 1←→↓
Pumps	<u>0</u> %	speed		Pumps	B	00S		REACT			%		1		↓
Destas				- 1	C	avail		RPV PR			psię		100		<u> </u>
Recirc	A	avail		Feed	A	005		RPV W			incl		10		↓
		6 speed		Pumps	В	00S		DRYWE			deg		246		↑
10	CF	RD			С	005				R TEMP	deg	F	92		1
CRD	A	insrvc		CST Lev	el A	<u>32</u> ft.		TORUS	WATE	R LEVEL	inch	nes	130		\downarrow
Pumps	В	insrvc			B	<u>32</u> ft.		DRYWE	LL PR	ESSURE	psig)	16.4		↑
11	SB	GT		13	RB V	ENT		TORUS	PRES	SURE	psig	1	15.0		1
	A	avail			isolat	ed		CONTA			%		0		\leftrightarrow
	В	insrvc		RB	d/p <u>-0.</u>	25_ inches H	₂O	CONTA	N, O ₂ (CONC.	%		0		↔

1 AC P	OWE	ER SOU	IRCES	2	SAFE	GUARDS		3	Rŀ	IR		Mode		4	CS
UAT		005						Loop A:	A	insrvc				Loop	A:
				Rx Trip S	Signal <u>M</u>	lanual			С	insrvc					avail
S/U XFN	/ R	insrvc									Tor	us Coolin	g		
				Mode	S/D)								Loop	Flow:
S/D XFN	/IR	avail		Switch				Loop Flo	ow	<u>900 gpm</u>			ĺ	-	<u>0</u> gpm
EDG A		insrvc		SBLC	А	avail		Loop B:	В	insrvc				Loop	 B:
				Pumps	В	avail			D	insrvc				F	avail
EDG B		insrvc									Tor	us Coolin	g l		
				SBLC TK		1, <u>300</u> gal							Ĭ	Loop	Flow:
BODG		avail						Loop Flo	w _4,	<u>900_</u> gpm					gpm
5	Р	CIS		6			COOL	ING WA	TER	· · · · · · · · · · · · · · · · · · ·				7	HPCI
Rec	uired	Isolate	<u>d</u>	RBCCW	Loop	A A	insrvc	SS	W	Loop A	А	insrvc			00S
	N	Y	(MSIVs)	Pumps		В	insrvc	l Pur	nps		В	insrvc			
	Ý	Y	(Pri Cont)			С	avail	I		Loop B	D	insrvc			
GP 3	Ý	Y	(SDC)		Loop	B D	avail	1			E	insrvc			
GP 4	Y	Ν	(HPCI)			Е	insrvc	1		Swing	С	avail	Г	8	RCIC
GP 5 N	N	N	(RCIC)			F	insrvc	1					Г	, <u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	avail
GP 6	Y	Y	(RWCU)	TBCCW		A	insrvc	Sea	Wate	er	A	avail			
Bypassed		<u></u>		Pumps		В	avail	Pur	nps		В	avail			
9	RE	CIRC		12	FEED	/COND				CRI	FICAL	PARAM	ETER	3	
Recirc	А	avail		Cond	А	insrvc					TIN	1E	3:15		TREND ↑←→↓
Pumps	<u>0</u> %	speed		Pumps	В	005		REACTO	DR PO	WER	%		1		\leftrightarrow
					С	avail		RPV PR	ESSU	RE	psi	g	50		\downarrow
Recirc	А	avail		Feed	А	005		RPV WA	TER I	EVEL	inc	hes	10		+
Pumps	<u>28</u> %	% speed		Pumps	В	00S		DRYWE	LL TE	MP	deg	j F	226		↑
10	CI	RD			С	00S		TORUS	WATE	R TEMP	deç	, F	88		1
CRD	А	insrvc		CST Lev	el A	A <u>32</u> ft.		TORUS	WATE	RLEVEL	inc	hes	130		↓
Pumps	В	insrvc			E	3 <u>32</u> ft.		DRYWE	L PR	ESSURE	psi	3	13.4		↑
11	SB	GT		13	RB V	'ENT		TORUS	PRES	SURE	psi)	12.0		↑
	Α	avail			isola	ted		CONTAI	N. H₂ (CONC.	%		0		\leftrightarrow
	В	insrvc		RB	d/p <u>-0</u>	.25_ inches	H₂O	CONTAI	N. O ₂ (CONC.	%		0		↔

			PNPS 99-06A							December	7, 1999			·
1 AC PO	WER SOL	IRCES	2	SAFE	GUARDS		3	RH	R		Mode		4	CS
UAT	005		1				Lo	op A: A	insrvc				Loo	p A:
			Rx Trip S	Signal <u>M</u>	lanual			С	insrvc					avail
S/U XFMR	insrvc									Tor	us Cooling			
			Mode	S/D)								Loo	p Flow:
S/D XFMR	avail		Switch				Lo	op Flow <u>4</u>	<u>900 g</u> pm					0gpm
EDG A	insrvc		SBLC	А	avail		Lo	op B: B	insrvc				Loo	р В:
			Pumps	В	avail			D	insrvc					avail
EDG B	insrvc									Tor	us Cooling			
_			SBLC TH	(LVL <u>4</u>	<u>,300_</u> gal								Loo	p Flow:
BODG	avail						Lo	op Flow <u>4,9</u>	00_gpm					gpm
5	PCIS		6			COOL	NG	WATER					7	HPCI
<u>Requi</u>			RBCCW	Loop	A A	insrvc		SSW	Loop A	А	insrvc			005
GP1 N	Y	(MSIVs)	Pumps		В	insrvc		Pumps		В	insrvc			
GP2 Y	Y	(Pri Cont)			С	avail			Loop B	D	insrvc			
GP3 Y	Y	(SDC)		Loop	BD	avail		1		Е	insrvc			
GP4 Y	N	(HPCI)			E	insrvc		1	Swing	С	avail		8	RCIC
GP5 N	N	(RCIC)			F	insrvc		 						005
GP6 Y	Y	(RWCU)	TBCCW		A	insrvc		Sea Wate	r	A	avail			
Bypassed			Pumps		В	avail		Pumps		В	avail			
9 F	RECIRC		12	FEED	/COND				CRIT	ICAL	PARAMI	ETERS	3	
Recirc A	avail		Cond	А	insrvc					TIN	1E	3:30		TREND 1←→↓
Pumps <u>0</u>	% speed		Pumps	В	00S		RE.	ACTOR PO	WER	%		1		\leftrightarrow
				С	avail		RP	V PRESSUF	RE	psi	9	50		Ļ
Recirc A	avail		Feed	А	005		RP	V WATER L	EVEL	inc	hes	10		↔
Pumps <u>2</u>	<u>8</u> % speed		Pumps	В	00S		DR	YWELL TEN	ΛP	deg	, F	200		↓
10	CRD			С	005		то	RUS WATE	R TEMP	deg	IF	86		4
CRD A	insrvc		CST Lev	el A	A <u>32</u> ft.		TO	RUS WATE	R LEVEL	inc	nes	129	-+	\leftrightarrow
Pumps B	insrvc			E	3 <u>32</u> ft.		DR	YWELL PRE	ESSURE	psi	3	10.4	-+	Ļ
11 \$	SBGT		13	RB V	'ENT		ТО	RUS PRESS	SURE	psi)	9.4		↓
A	avail			isola	ted		co	NTAIN. H ₂ C	ONC.	%		0		\leftrightarrow
В	insrvc		RB	d/p <u>-0</u>	. <u>25_</u> inches ⊢	l₂O	CO	NTAIN. O₂ C	ONC.	%		0		\leftrightarrow

	i de la compañía de													1 and the second
	*. `.			PNPS 99-06A						Decembe	er 7, 1999			б. Т.
	POW	ER SOL	JRCES	2	SAFEGUARI	DS	3	RH	IR		Mode	4		CS
UAT		005					Loo	PA: A	insrvc			L	.oop	A:
S/LV		inence		Rx Trip S	Signal <u>Manual</u>			С	insrvc	_				avail
S/U X		insrvc		Mode	S/D					То	rus Coolin	~		F 1
S/D X	FMR	avail		Switch	3/0			n Flow 4	<u>900 gpm</u>				•	Flow: 0gpm
									<u></u> 9pm					0 9pm
EDG /	A	insrvc		SBLC	A avail		Loop	B: B	insrvc			ι	.oop	B:
				Pumps	B avail			D	insrvc				-	avail
EDG	В	insrvc								То	rus Cooling	g		
BODG	~	ovoil		SBLC TH	CLVL <u>4,300</u> ga	al						L	oop	Flow:
		avail						Flow _4,9	•••••••••••••••••••••••••••••••••••••••				-	gpm
5	Require	PCIS		6 RBCCW		COOL		WATER		·····	·······	7		HPCI
GP 1	N N	ed <u>Isolate</u> Y	<u>u</u> (MSIVs)	Pumps	Loop A A B			SSW Pumps	Loop A	A	insrvc			005
GP 2	Ŷ	Y	(Pri Cont)	i unipo	C		1	Fullips	Loop B	B D	insrvc insrvc			
GP 3	Y	Ŷ	(SDC)		Loop B D				Loop D	E	insrvc			
GP 4	Y	Ν	(HPCI)		E	insrvc	i		Swing	С	avail	8		RCIC
GP 5	N	Ν	(RCIC)		F	insrvc	Í		Ū			⊢ ⊢		005
GP 6	Y	Y	(RWCU)	TBCCW	A	insrvc	 	Sea Wate	r		avail			
Bypass	ed			Pumps	В	avail	1	Pumps		В	avail			
9		ECIRC		12	FEED/COND				CRIT	FICAL	PARAM	ETERS		
Recirc		avail		Cond	A insrvo	0				TI	ME	3:45		TREND 1↔↓
Pumps	s <u>0</u> %	6 speed		Pumps	B oos			CTOR PO		%		1		\leftrightarrow
Desta	•				C avail			PRESSU		ps		50		\leftrightarrow
Recirc		avail % speed		Feed	A oos			WATER L			ches	10		÷
Pumps		% speed		Pumps	B oos				· · · · · · · · · · · · · · · · · · ·		g F	179		<u> </u>
10 CRD	C	RD insrvc		COTION	C 00S	4					g F	83		↓
Pumps		insrvc		CST Lev	el A <u>32</u> B <u>32</u>			US WATE			ches	129		↔
11		BGT		13				US PRES		ps		7.1		+
	A	avail		15	isolated			TAIN. H ₂ C		ps %		<u>5.7</u>		↓
	В	insrvc		RB	d/p <u>-0.25</u> inch	es H₂O		TAIN. 0 ₂ 0		%		0		↔
									· · · · · · · ·					\leftrightarrow

				FINE 3 99-00A				_			December				
	OW	ER SOU	RCES	2	SAFE	GUARDS		3	RH	IR		Node		4	CS
UAT		005						Lo	op A: A	insrvc				Loo	pp A:
				Rx Trip S	Signal <u>M</u>	anual			С	insrvc					avail
S/U XFN	MR	insrvc									Tor	us Cooling	g		
				Mode	S/D	I								Loo	p Flow:
S/D XFN	MR	avail		Switch				Lo	pp Flow	<u>1900 g</u> pm					0 gpm
EDG A		insrvc		SBLC	А	avail		Loc	opB:B	insrvc				Loo	p B:
				Pumps	В	avail			D	insrvc					avail
EDG B		insrvc									Tor	us Cooling	g		
					LVL <u>4</u>	<u>.300</u> gal								Loo	p Flow:
BODG		avail							p Flow <u>4,</u>	<u>900_</u> gpm					gpm
5		CIS		6			COOL	ING	WATER					7	HPCI
	quirec		_	RBCCW	Loop	A A	insrvc		SSW	Loop A	А	insrvc			00S
	N	Y	(MSIVs)	Pumps		В	insrvc		Pumps		В	insrvc			
	Y	Y	(Pri Cont)			С	avail			Loop B	D	insrvc			
	Y	Y	(SDC)		Loop		avail				Е	insrvc			
GP 4	Y	Ν	(HPCI)			E	insrvc			Swing	С	avail		8	RCIC
GP 5	N	Ν	(RCIC)			F	insrvc								005
GP 6	Y	Y	(RWCU)	TBCCW		A	insrvc		Sea Wate	er	A	avail			
Bypassed	1			Pumps		В	avail		Pumps		В	avail	ĺ		
9	RE	CIRC		12	FEED	COND				CRI	ICAL	PARAM	ETER	S	· · · · · · · · · · · · · · · · · · ·
Recirc	Α	avail		Cond	A	insrvc	-				TIN	1E	4:0	D	TREND 1 ←→↓
Pumps	<u>0</u> %	speed		Pumps	В	00S		RE	ACTOR PC	WER	%		0.5		↓
					С	avail		RP	V PRESSU	RE	psi	g	50		↔
Recirc	А	avail		Feed	А	00S		RP	V WATER I	EVEL	inc	hes	10		\leftrightarrow
Pumps	<u>28</u> 9	% speed		Pumps	В	00S		DR	YWELL TE	MP	deg	F	157	,	\downarrow
10	C	RD			С	00S		ТО			deg	IF	80		↓
CRD	A	insrvc		CST Lev	el A	∖ <u>32</u> ft.		то		RLEVEL	incl		129	,	· ↔
Pumps	в	insrvc				3 <u>32</u> ft.			YWELL PR		psig		4.3		
11	SE	GT		13	RB V				RUS PRES		psig		3.0		¥
	A	avail	· · · · · ·		isolat				NTAIN. H ₂		%		0.0		
	В	insrvc		RR		.25_ inches ⊢	LO				%		0		<u></u> ↔
					ωγ <u></u> υ.		.2.								\leftrightarrow

1 AC POWER SOURCES 2 SAFEGUARDS 3 RHR Mode 4 CS UAT cos Rx Trip Signal Manual Rx Trip Signal Manual Loop A: A Insrvc Loop A: C Insrvc avail S/U XFMR insrvc Mode S/D S/D KR Trip Signal Manual C Insrvc avail Loop A: A Insrvc avail Loop B: B Insrvc avail Loop Flow _4900_gpm Loop Plow: avail Loop Plow: avail Loop Flow: Loop Flow: Avail Loop F			PNPS 99-06A						December	7, 1999		•	
S/U XFMR insrvc Rx Trip Signal Manual C insrvc Torus Cooling S/D XFMR avail Switch Loop Flow_4900_gpm	1 AC POV	VER SOURCES	2 SAFE	EGUARDS		3	RH	R	N	lode	4	CS	
S/U XFMR insrvc Mode S/D S/D XFMR avail Switch Loop Flow4900_gpm Loop Flow4900_gpm Loop Flow EDG A insrvc SBLC A avail Loop B: B insrvc D insrvc Loop Flow BODG avail sBLC TK LVL_4.300_gal Loop Flow4.900_gpm Torus Cooling Loop Flow Loop Flow BODG avail SBLC TK LVL_4.300_gal Loop Flow4.900_gpm Torus Cooling Loop Flow BODG avail RECIP 6 COOLING WATER 7 HPCI GP 1 N Y (MSIVs) Pumps B insrvc SSW Loop B D insrvc oos GP 2 Y Y (Pi Cont) C avail Loop B D insrvc oos GP 4 Y N (HPCI) E insrvc Swing C avail GP 5 N N (RCIC) FE insrvc Swing C avail gpassed	UAT	005				Loop A:	А	insrvc			L	pop A:	
S/D XFMR avail Mode S/D EDG A insrvc SBLC A avail Loop Flow 4900_gpm Loop Flow: gpm EDG B insrvc SBLC K avail Loop Flow 4900_gpm Loop Flow:			Rx Trip Signal <u>N</u>	<u>/lanual</u>			С	insrvc				avail	
S/D XFMR avail Switch Loop Flow _4900_gpm	S/U XFMR	insrvc							Toru	s Cooling	l i		
EDG A insrvc SBLC A avail Loop B: Binsrvc Loop B: Binsrvc Loop B: avail BODG avail SBLC TK LVL 4.300 gal Loop Flow 4.900 gpm Loop Flow Loop Flow				C							L	oop Flow:	
EDG B insrvc Pumps B avail D insrvc Torus Cooling avail BODG avail SBLC TK LVL _4.300_gal Loop Flow _4.900_gpm	S/D XFMR	avail	Switch			Loop Flov	N _ 4	<u>900 g</u> pm				0 gpm	i -
EDG B insrvc Pumps B avail D insrvc Torus Cooling avail BODG avail SBLC TK LVL _4.300_gal Loop Flow _4.900_gpm	EDG A	insrvc	SBLC A	avail		Loop B:	в	insrvc	*****			 000 B [.]	
EDG B insrvc SBLC TK LVL _ 4.300 gal Torus Cooling Loop Flow:												•	
BODG avail SBLC TK LVL 4.300 gal Loop Flow 4.900 gpm Loop Flow:0 gpm 5 PCIS 6 COOLING WATER 7 HPCI Required isolated GP 1 N Y (MSIVs) (MSIVs) RBCCW Loop A A insrvc SSW Loop B A insrvc oos GP 2 Y Y (MSIVs) (PI 2 Pumps B insrvc C avail Loop B D insrvc oos GP 3 Y Y (SDC) Loop B D avail Loop B D insrvc Swing C avail 8 RCIC GP 4 Y N (HPCI) E insrvc Sea Water A avail 005 Bypassed	EDG B	insrvc							Toru	s Cooling			
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			SBLC TK LVL	<u>4,300_</u> gal						, v		oop Flow:	
5 PCIS 6 COOLING WATER 7 HPCI Required Isolated RBCCW Loop A A insrvc SSW Loop A A insrvc oos GP 1 N Y (MSIVs) Pumps B insrvc Pumps B insrvc oos GP 2 Y Y (Pic Cont) C avail Loop B D insrvc oos GP 3 Y Y (SDC) Loop B D avail Loop B D avail oos GP 4 Y N (HPCI) E insrvc Swing C avail 8 RCIC GP 5 N N (RCIC) F insrvc Sea Water A avail 0os Bypassed	BODG	avail				Loop Flov	v <u>4,</u> 9	<u>900_</u> gpm				•	1
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	5	PCIS	6		COOL	NG WA	TER				7	HPCI	
GP 2 Y Y (Pri Cont) C avail Loop B D insrvc GP 3 Y Y (SDC) Loop B D avail Loop B D insrvc GP 4 Y N (HPCI) E insrvc Swing C avail B RCIC GP 5 N N (RCIC) F insrvc Sea Water A avail Pumps B avail oos Bypassed TECIRC 12 FEED/COND CRITICAL PARAMETERS TREND 1<→↓ Recirc A avail Pumps B oos ReV PRESSURE psig 50 ↔ Pumps B oos RPV PRESSURE psig 50 ↔ Pumps B oos TORUS WATER LEVEL inches 10 ↔ Pumps B oos TORUS WATER LEVEL inches 129 ↔ Pumps B oos TORUS WATER LEVEL inches 129 ↔ Pumps B oos<	Requir	ed Isolated	RBCCW Loo	pA A	insrvc	SSV	V	Loop A	A	insrvc			
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	GP1 N	Y (MSIV) Pumps	В	insrvc	Pum	ps		в	insrvc			
GP 4 Y N (HPCI) E instruct Swing C avail 8 RCIC GP 5 N N (RCIC) F instruct Sea Water A avail 00S Bypassed		Y (Pri Co	t)	С	avail	1		Loop B	D	insrvc			
GP 5NN(RCIC)FinstrucSea WaterAavailOOGP 6YY(RWCU)TBCCWAinstrucSea WaterAavailoosBypassedPumpsBavailPumpsBavailPumpsBavailoos9RECIRC12FEED/CONDCRITICAL PARAMETERSTIME4:15TREND $\uparrow \leftarrow \rightarrow \downarrow$ Pumps Q % speedCondAinstrucREACTOR POWER%0.5 \leftrightarrow Pumps Q % speedPumpsBoosREACTOR POWER%0.5 \leftrightarrow RecircAavailFeedAoosRPV PRESSUREpsig50 \leftrightarrow Pumps28 % speedPumpsBoosDRYWELL TEMPdeg F138 \downarrow 10CRDCoosTORUS WATER TEMPdeg F78 \downarrow PumpsBinstrucB32ft.DRYWELL PRESSUREpsig2.3 \downarrow PumpsBinstrucB32ft.DRYWELL PRESSUREpsig1.3 \downarrow AavailisolatedCONTAINCONC.%0 \leftrightarrow	GP3 Y	Y (SDC)	Loop	pB D	avail				Е	insrvc			
GP 6YY(RWCU)TBCCWAinsrvcSea WaterAavailPumpsPumpsBavailPumpsBavailPumpsBavail9RECIRC12FEED/CONDCRITICAL PARAMETERSRecircAavailCondAinsrvcTIME4:15TREND $\uparrow \leftarrow \rightarrow \downarrow$ Pumps0 % speedPumpsBoosREACTOR POWER%0.5 \leftrightarrow RecircAavailFeedAoosRPV PRESSUREpsig50 \leftrightarrow Pumps28 % speedPumpsBoosDRYWELL TEMPdeg F138 \downarrow 10CRDCoosTORUS WATER TEMPdeg F78 \downarrow PumpsBinsrvcCST LevelA32ft.DRYWELL PRESSUREpsig2.3 \downarrow 11SBGT13RB VENTTORUS PRESSUREpsig1.3 \downarrow \downarrow \downarrow \downarrow AavailisolatedCONTAIN. H ₂ CONC.%0 \leftrightarrow \downarrow \downarrow	GP4 Y	N (HPCI)		E	insrvc			Swing	С	avail	8	RCIC	
BypassedPumpsBavailPumpsBavail9RECIRC12FEED/CONDCRITICAL PARAMETERSRecircAavailCondAinsrvcTIME4:15TREND $\uparrow \leftarrow \rightarrow \downarrow$ Pumps 0 % speedPumpsBoosREACTOR POWER%0.5 \leftrightarrow RecircAavailFeedAoosRPV PRESSUREpsig50 \leftrightarrow Pumps 28 % speedPumpsBoosDRYWELL TEMPdeg F138 \downarrow 10CRDCoosTORUS WATER LEVELinches10 \leftrightarrow CRDAinsrvcCST LevelA_32_ft.TORUS WATER LEVELinches129 \leftrightarrow PumpsBinsrvcB_32_ft.DRYWELL PRESSUREpsig2.3 \downarrow 11SBGT13RB VENTTORUS PRESSUREpsig1.3 \downarrow AavailisolatedCONTAIN. H₂ CONC.%0 \leftrightarrow \downarrow	GP5 N	N (RCIC)		F	insrvc	1						00S	
9RECIRC12FEED/CONDCRITICAL PARAMETERSRecircA availCondA insrvcTIME4.15TREND $\uparrow \leftarrow \rightarrow \downarrow$ Pumps0 % speedPumpsB oosREACTOR POWER%0.5 \leftrightarrow RecircA availFeedA oosRPV PRESSUREpsig50 \leftrightarrow Pumps28 % speedPumpsB oosRPV WATER LEVELinches10 \leftrightarrow Pumps28 % speedPumpsB oosDRYWELL TEMPdeg F138 \downarrow 10CRDC oosTORUS WATER TEMPdeg F78 \downarrow CRDA insrvcCST LevelA_32_ft.TORUS WATER LEVELinches129 \leftrightarrow PumpsB insrvcB_32_ft.DRYWELL PRESSUREpsig2.3 \downarrow 11SBGT13RB VENTTORUS PRESSUREpsig1.3 \downarrow A availisolatedCONTAIN H2 CONC.%0 \leftrightarrow	GP6 Y	Y (RWC		A	insrvc	Sea	Wate	r	A	avail			
RecircA availCondA insrvcTIME4:15TREND $\uparrow \leftarrow \rightarrow \downarrow$ Pumps0 % speedPumpsBoosREACTOR POWER%0.5 \leftrightarrow RecircA availFeedAoosRPV PRESSUREpsig50 \leftrightarrow Pumps28 % speedPumpsBoosDRYWELL TEMPdeg F138 \downarrow 10CRDCoosTORUS WATER TEMPdeg F78 \downarrow CRDAinsrvcCoosTORUS WATER LEVELinches129 \leftrightarrow PumpsBinsrvcB32_ft.DRYWELL PRESSUREpsig2.3 \downarrow 11SBGT13RB VENTTORUS PRESSUREpsig1.3 \downarrow AavailisolatedCONTAIN. H ₂ CONC.%0 \leftrightarrow	Bypassed		Pumps	В	avail	Pum	ps		В	avail			
Pumps 0% speedPumpsBoos CREACTOR POWER%0.5 \leftrightarrow RecircAavailFeedAoosRPV PRESSUREpsig50 \leftrightarrow Pumps28 % speedPumpsBoosRPV WATER LEVELinches10 \leftrightarrow 10CRDCoosDRYWELL TEMPdeg F138 \downarrow CRDAinsrvcCoosTORUS WATER TEMPdeg F78 \downarrow PumpsBinsrvcB32ft.DRYWELL PRESSUREpsig2.3 \downarrow 11SBGT13RB VENTTORUS PRESSUREpsig1.3 \downarrow AavailisolatedCONTAIN. H2 CONC.%0 \leftrightarrow	9 R	ECIRC	12 FEED	COND				CRIT	ICAL F	ARAME	TERS		
RecircA availCavailRPV PRESSUREpsig50 \leftrightarrow Pumps28 % speedFeedAoosRPV WATER LEVELinches10 \leftrightarrow Pumps28 % speedPumpsBoosDRYWELL TEMPdeg F138 \downarrow 10CRDCoosTORUS WATER TEMPdeg F78 \downarrow CRDAinsrvcCST LevelA_32_ft.TORUS WATER LEVELinches129 \leftrightarrow PumpsBinsrvcB_32_ft.DRYWELL PRESSUREpsig2.3 \downarrow 11SBGT13RB VENTTORUS PRESSUREpsig1.3 \downarrow AavailisolatedCONTAIN. H2 CONC.%0 \leftrightarrow			Cond A	insrvc					TIM	E	4:15	TREND 1←	, ,
RecircAavailFeedAoosRPV WATER LEVELinches10 \leftrightarrow Pumps <u>28</u> % speedPumpsBoosDRYWELL TEMPdeg F138 \downarrow 10CRDCoosTORUS WATER TEMPdeg F78 \downarrow CRDAinsrvcC σ TORUS WATER LEVELinches129 \leftrightarrow PumpsBinsrvcB32ft.DRYWELL PRESSUREpsig2.3 \downarrow 11SBGT13RB VENTTORUS PRESSUREpsig1.3 \downarrow AavailisolatedCONTAIN. H2 CONC.%0 $↔$	Pumps <u>0</u>	% speed	Pumps B	005		REACTO	R PO	WER	%		0.5	\leftrightarrow	
Pumps $\underline{28}$ % speedPumpsBoosDRYWELL TEMPdeg F138 \downarrow 10CRDCoosTORUS WATER TEMPdeg F78 \downarrow CRDAinsrvcCST LevelA32ft.TORUS WATER LEVELinches129 \leftrightarrow PumpsBinsrvcB32ft.DRYWELL PRESSUREpsig2.3 \downarrow 11SBGT13RB VENTTORUS PRESSUREpsig1.3 \downarrow AavailisolatedCONTAIN. H₂ CONC.%0 $↔$			С	avail		RPV PRE	SSUF	RE	psig		50	\leftrightarrow	
10 CRD C oos TORUS WATER TEMP deg F 78 ↓ CRD A insrvc CST Level A_32_ft. TORUS WATER LEVEL inches 129 ↔ Pumps B insrvc B_32_ft. DRYWELL PRESSURE psig 2.3 ↓ 11 SBGT 13 RB VENT TORUS PRESSURE psig 1.3 ↓ A avail isolated CONTAIN. H₂ CONC. % 0 ↔			Feed A	00S		RPV WA1	ER L	EVEL	inch	es	10	\leftrightarrow	
CRDAinsrvcCST LevelA32ft.TORUS WATER LEVELinches129 \leftrightarrow PumpsBinsrvcB32ft.DRYWELL PRESSUREpsig2.3 \downarrow 11SBGT13RB VENTTORUS PRESSUREpsig1.3 \downarrow AavailisolatedCONTAIN. H₂ CONC.%0 $↔$	Pumps <u>28</u>	<u>3</u> % speed	Pumps B	005		DRYWEL	LTEN	ΛP	deg	F	138	↓ ↓	
Pumps B insrvc B 32 ft. DRYWELL PRESSURE psig 2.3 11 SBGT 13 RB VENT TORUS PRESSURE psig 1.3 ↓ A avail isolated CONTAIN. H₂ CONC. % 0 ↔	10 (CRD	С	00S		TORUS V	VATE	R TEMP	deg	F	78	↓	
11 SBGT 13 RB VENT TORUS PRESSURE psig 1.3 ↓ A avail isolated CONTAIN. H₂ CONC. % 0 ↔		insrvc	CST Level	A <u>32</u> ft.		TORUS W	VATE	RLEVEL	inch	es	129	\leftrightarrow	
A avail isolated CONTAIN. H₂ CONC. % 0 B insp(c BB d(n = 0.25 inspect U.O. CONTAIN. O. CONC. % 0	Pumps B	insrvc		B <u>32</u> ft.		DRYWEL	_ PRE	ESSURE	psig		2.3	↓ ↓	
	11 S	BGT	13 RB \	/ENT		TORUS P	RESS	SURE	psig		1.3	Ļ	
B insrvc RB d/p -0.25 inches H ₂ O CONTAIN. O ₂ CONC. % O \leftrightarrow			isola	ited		CONTAIN	. H₂ C	ONC.	%		0	↔	
	В	insrvc	RB d/p0	0.25_ inches H	₂O	CONTAIN	. O ₂ C	ONC.	%		0	\leftrightarrow	

1 AC POWER SOURCES	2 SAFEGUARDS	3 RHR Mode	4 00
UAT oos		Loop A: A insrvc	4 CS Loop A:
	Rx Trip Signal <u>Manual</u>	C insrvc	avail
S/U XFMR insrvc	· · · · · · · · · · · · · · · · · · ·	Torus Cooling	avali
	Mode S/D	, inde booming	Loop Flow:
S/D XFMR avail	Switch	Loop Flow <u>4900</u> gpm	gpm
EDG A insrvc	SBLC A avail	Loop B: B insrvc	Loop B:
	Pumps B avail	D insrvc	avail
EDG B insrvc		Torus Cualing	
	SBLC TK LVL <u>4,300</u> gal		Loop Flow:
BODG avail		Loop Flow <u>4,900</u> gpm	gpm
5 PCIS	6 COOL	ING WATER	7 HPCI
Required Isolated	RBCCW Loop A A insrvc	SSW Loop A A insrvc	005
GP1 N Y (MSIVs	•	Pumps B insrvc	
GP 2 Y Y (Pri Con		Loop B D insrvc	
GP3 Y Y (SDC)	Loop B D avail	E insrvc	
GP4 Y N (HPCI)	E insrvc	Swing C avail	8 RCIC
GP 5 N N (RCIC)	F insrvc		005
GP6 Y Y (RWCL	TBCCW A insrvc	Sea Water A avail	-
Bypassed	Pumps B avail	Pumps B avail	
9 RECIRC	12 FEED/COND	CRITICAL PARAMETE	ERS
Recirc A avail	Cond A insrvc	TIME 4	30 TREND 1 ←→↓
Pumps <u>0</u> % speed	Pumps B oos	REACTOR POWER %	0.5 ↔
	C avail	RPV PRESSURE psig	50 ↔
Recirc A avail	Feed A oos		10 ↔
Pumps <u>28</u> % speed	Pumps B oos	DRYWELL TEMP deg F 1	122 ↓
10 CRD	C oos	TORUS WATER TEMP deg F	76 ↓
CRD A insrvc	CST Level A <u>32</u> ft.	TORUS WATER LEVEL inches 1	29 ↔
Pumps B insrvc	B <u>32</u> ft.	DRYWELL PRESSURE psig	1.7 ↓
11 SBGT	13 RB VENT	TORUS PRESSURE psig (D.8 ↓
A avail	isolated	CONTAIN. H₂ CONC. %	0 ↔
B insrvc	RB d/p <u>-0.25</u> inches H₂O	CONTAIN. O₂ CONC. %	0 ↔

1 AC P	OWER S	OURCES	2	SAFE	GUARDS		3	Rŀ	IR		Mode		4	CS
UAT	005			<u></u>			Loop	A: A	insrvc				Loop A	
			Rx Trip S	Signal <u>M</u>	lanual			С	insrvc			Í	·	avail
S/U XFM	/IR insr	vc								Tor	us Coolin	g		
			Mode	S/D)								Loop F	low:
S/D XFN	/IR avai	ł	Switch				Loop	Flow 4	<u>900 g</u> pm					<u>0</u> gpm
EDG A	insn	/C	SBLC	A	avail		Loop	B: B	insrvc				Loop E	5:
			Pumps	В	avail			D	insrvc					avail
EDG B	insr	/C								Tor	us Coolin	g		
DODO			SBLC TK	LVL <u>4</u>	. <u>300_</u> gal								Loop F	low:
BODG	avai	l						Flow 4,9	<u>900_</u> gpm					gpm
5	PCIS		6			COOL		NATER					7	HPCI
		ated	RBCCW	Loop		insrvc	i	SSW	Loop A	А	insrvc			005
	N Y	· · · ·	Pumps		В	insrvc	¦ 1	Pumps		В	insrvc	ĺ		
GP 2		,			C	avail	ļ		Loop B	D	insrvc			
GP3 Y		· · /		Loop		avail				Е	insrvc			
GP4 Y					E	insrvc			Swing	С	avail		8	RCIC
GP 5 N		` '			FF	insrvc	 					Γ		00S
GP6 Y	-	(RWCU)	TBCCW		А	insrvc		Sea Wate	r		avail			
Bypassed			Pumps		В	avail	F	Pumps		в	avail			
9	RECIRC			FEED/	COND				CRIT	ICAL I	PARAM	ETERS	5	
Recirc	A ava		Cond	А	insrvc					TIM	1E	4:45	T	REND Î←→↓
Pumps	0 % speed	t	Pumps	В	00S		REAC	TOR PO	WER	%		0.5		\leftrightarrow
				С	avail	i	RPV F	PRESSU	RE	psię	,	50		\leftrightarrow
Recirc	A ava		Feed	А	005		RPV	NATER L	EVEL	incl	nes	10		\leftrightarrow
Pumps	28 % spee	ed	Pumps	В	00S		DRYV	VELL TEN	ЛР	deg	F	117		\downarrow
10	CRD			С	005		TORU	IS WATE	R TEMP	deg	F	74		\downarrow
CRD	A insr	VC	CST Leve	el A	. <u>32</u> ft.		TORU	IS WATE	R LEVEL	inch	nes	129		\leftrightarrow
Pumps	B insr	VC		В	3 <u>32</u> ft.		DRYV	VELL PRE	ESSURE	psig	, ,	1.3		↓
11	SBGT	· · · · · · · · · · · · · · · · · · ·	13	RB V	ENT		TORU	S PRESS	SURE	psig		0.4		Ļ
	A avai	1		isolat	ed		CONT	AIN. H₂ C	ONC.	%		0		 ↔
	B insrv	/C	RB	d/p <u>~0.</u>	<u>25</u> inches H	₂ O	CONT	AIN. O₂ C	ONC.	%		0	-	\leftrightarrow

1. AC POW	ER SOU	IRCES	2	SAFE	GUARDS		3		RH	R	December	lode		4	CS
UAT	00S	····							A	insrvc	•	nouo		Loop	
Í			Rx Trip S	Signal <u>Ma</u>	<u>anual</u>			-	С	insrvc				r	avail
S/U XFMR	insrvc										Tor	us Coolin	g		
			Mode	S/D										Loop	Flow:
S/D XFMR	avail		Switch				Loc	p Flow_	_4	<u>900 g</u> pm					0 gpm
EDG A	insrvc		SBLC	A	avail		Loc	•	3	insrvc				Loop	B:
EDC B	in		Pumps	В	avail			3)	insrvc					avail
EDG B	insrvc			110 4	000						Toru	is Coolin	g		
BODG	avail		SBLC TK	LVL <u>4</u> ,	<u>,300_</u> gai									Loop	Flow:
							1			00_ gpm					gpm
5 I Require	PCIS		6			COOL	NG	WATE	R					7	HPCI
GP1 N	<u>d Isolate</u> Y	_	RBCCW	Loop		insrvc	i I	SSW		Loop A	A	insrvc			005
GP1 N GP2 Y	Ý	(MSIVs) (Pri Cont)	Pumps		B	insrvc	İ	Pumps			В	insrvc			
GP3 Y	Ý	(SDC)		Loop		avail avail	. 1			Loop B	D	insrvc			
GP4 Y	N	(HPCI)		Loop			- 			o :	E	insrvc			
GP5 N	N	(RCIC)			E	insrvc	1			Swing	С	avail		8	RCIC
GP6 Y	Y	(RWCU)	TBCCW		F	insrvc insrvc	t								00S
Bypassed	•	(((())))	Pumps		A B	avail	 	Sea Wa Pumps		ſ	A	avail			
	ECIRC			reen/		avali	!	Fumps			B	avail			······································
Recirc A	avail		12 Cond	FEED/						CRIT		PARAM			
	6 speed		Pumps	В	insrvc oos				<u></u>	A/F D	TIM	E	5:00		TREND 1←→↓
	o speca		rumps	C							%		0.5		\leftrightarrow
Recirc A	avail		Feed	A	avail oos		-	V PRESS			psig		50		↔
	% speed		Pumps	В							inch		10		\leftrightarrow
			Fumps		00S			WELL T			deg		110		4
in the second	RD			C	00S			RUS WA			deg		73		↓ .
	insrvc		CST Leve		<u>32</u> ft.						inch		129		\leftrightarrow
· · · · · · · · · · · · · · · · · · ·	insrvc				<u>32</u> ft.		_	WELL P			psig		1.3		\leftrightarrow
	<u>IGT</u>		13	RB VE	the second s			US PRE			psig		0.1		¥
A	avail			isolate		_		ITAIN. H	-		%		0		\leftrightarrow
B	insrvc		RB	d/p <u>-0.2</u>	25_ inches H	O _s	CON	ITAIN. C	2 C	ONC.	%		0		\leftrightarrow

A. In-Plant Data

- 1. The core damage assessment was calculated using PNPS EP-IP-330 "Core Damage", Rev. 2B. The radionuclide relative abundance used are consistent with those listed in NEDO-22215 "Procedures for the Determination of Core Damage Under Accident Conditions", for fuel gap activity release ratios.
- 2. The postulated accident that occurs within the scenario will yield approximately 10% fuel cladding damage. All in-plant area radiation, airborne monitoring instrumentation and general area information will reflect measurements consistent with this amount of damage.
- 3. It is assumed that the reactor has been operating at a design power level of 1,998 MWT for ~280 days with no recent reactor shutdown.
- 4. Dose rates from post accident samples were calculated using the Radiological Health Handbook rule of thumb: R/hr at 1 foot = 6xCxE, where C is the number of curies and E is the energy in MeV. E is conservatively assumed to be 0.5 MeV for iodine and 0.7 MeV for noble gases. Shielded values assume a 2 inch and 4 inch lead pig if used.
- 5. In-plant radiological data will be provided to plant teams only when they perform appropriate tasks and request specific information.

B. <u>Off-site Data</u>

- The release path of radioactive material to the environment is postulated when a steam line breaks on HPCI that results in a steam leak into the HPCI area of the secondary containment. The released radioactive steam is then exhausted through the Standby Gas Treatment (SBGT) system to the main stack and released to the environment.
- 2. No filtering credit is allowed for the noble gases. Filtering efficiency for iodine and particulate removal via SBGT is taken to be approximately 99%.
- 3. Stack release rates are based on a release flow rate of 24,000 CFM for the low range main stack monitor and 4,000 CFM for the high range main stack monitor. These flow rates are consistent with isolation of the reactor building ventilation, initiation of the Reactor Building Emergency ventilation system, and continued use of Waste Building, Off Gas Building, and Turbine Building (high) fans.
- 4. The off-site dose projections (downwind gamma dose rates and air sample readings) were calculated using PNPS Dose Assessment Program DAPAR version 1.1. The field survey values presented are rounded off to provide realistic survey meter responses.

- 5. For gamma (dose rates) survey readings taken by field monitoring teams, the following information was used:
 - a) If a count rate instrument (E140N or Ludlum–12 with HP-210 probe) is used to track the plume, the meter count rate of 1,500 cpm on the count rate instrument is equivalent to approximately 1.0 mR/hr.
 - b) Whenever a team takes a "ground level" survey, the results are assumed to be the same as the "waist level" survey until after the plume has passed.
 - c) Certain field monitoring teams may take open window <u>and</u> closed window readings with their dose rate survey meters. If a team is located in the plume and air concentration is greater than zero, assume the open window reading is approximately <u>two times</u> the closed window reading for the gamma dose rate reading.
- 6. For air sample measurements taken by field monitoring teams, the following information was used:
 - a) If the field monitoring teams substitute a charcoal cartridge instead of the absorber media cartridge (silver zeolite) contained in the field monitoring kits, then all air sample data will be given as though the absorber media cartridges (silver zeolite) was used in the kits.
 - b) Air sample volume assumptions have been used in the calculation of the net count rates for the air sample results. The sample volume was assumed to be 20-cubic foot for both Pilgrim and Massachusetts field monitoring teams. If different volumes are collected, the air sample data provided in the tables should be adjusted proportionally.
 - c) Air sample net count rates for the adsorber media cartridges (silver zeolite) provided in the field data tables have been developed using DAPAR thyroid dose projections. The air sample net count rates were developed using this formula:

 $Conc.(uCi/cc) = \frac{netcpmxConversionFactor}{ExFxT}$

- where: E = Instrument Detector Efficiency in cpm/dpm (counts per disintegration) F = Flow rate of sample in cfm
 - T = Sample collection time in minutes
 - $CF = Conversion Factor (1.6 E-11 uCi-ft^3/dpm-cc)$

Forecast Message

SOUTHERN NEW ENGLAND ZONE FORECASTS NATIONAL WEATHER SERVICE, BOSTON MA.

A low pressure zone will remain in the region for today. Overcast weather conditions will continue with mostly cloudy skies and seasonable temperatures. High temperatures will be in the mid 40s and winds will be moderate from the East-Southeast. Tonight continued cloudy and cool with a chance of rain developing this evening. Chance of rain near 50 percent. Skies expected to clear by tomorrow morning with an area of high pressure dominating the region for the next several days.

GREATER BOSTON METROPOLITAN AREA NORTHWESTERN, COASTAL, AND SOUTHWESTERN MA.

This morning cloudy and cool with temperatures ranging 35° to 45°F. Winds from the East-Southeast at 5 to 10 MPH with gusts of up to 15 MPH.

This afternoon continued overcast with temperatures 35° to 45°. Winds from the Southeast at 8 to 10 MPH with gusts of up to 15 MPH.

This evening rain possibly with temperatures 35° to 45°. Winds from the Southeast at 8 to 10 MPH with gusts of up to 15 MPH. 40% chance of precipitation.

Tonight cloudy and breezy with temperatures 35° to 40°. Winds from the Southeast at 10 to 15 MPH with gusts of up to 20 MPH.

Tomorrow decreasing cloudiness with high temperatures 40° to 45°. Winds steady from the ESE at 5 to 10 MPH. 20% chance of precipitation.

Long range forecast - Clear skies with high temperatures 35° to 45° and low temperatures 25° to 35°. Winds will be steady from the SE at 5 to 10 MPH.

CAPE COD AND THE ISLANDS, SOUTH COASTAL, AND COASTAL R.I.

This morning cloudy and breezy with temperatures ranging from 30° to 40°F. Winds from the East-Southeast at 8 to 10 MPH with gusts of up to 15 MPH.

This afternoon continued cloudy and seasonable temperatures 35° to 45°. Winds from the East-Southeast at 10 to 15MPH with gusts of up to 20 MPH. 20% chance of precipitation.

This evening rain likely with temperatures 40° to 45°. Winds from the Southeast 10 to 15 MPH with gusts of up to 20 MPH. 60% chance of precipitation.

Tonight cloudy and cool with temperatures 35° to 40°. Winds from the Southeast 10 to 15 MPH with gusts of up to 25 MPH. 30% chance of precipitation.

Tomorrow decreasing cloudiness with high temperatures 40° to 45°. Winds steady from the ESE 8 to 10 MPH. 20% chance of precipitation.

Long range forecast - Clear skies with high temperatures 35° to 45° and low temperatures 25° to 35°. Winds will be steady from the SE at 8 to 10 MPH.

Meteorological, Vent and Flow Data

Meteorological Data

Vent and Flow Data

					-				
Scenario	220'	Tower	160' To	ower	33' Tov	wer	Delta T	Air Temp	SBC
Time	°Fror	n MPH	°From	MPH	°From	MPH	۴F	۴F	CF
00:00	118	10.0	116	9.5	120	8.7	-1.0	40	ISOLA
00:10	118	10.0	116	9.5	120	8.7	-1.0	40	4,00
00:15	119	10.0	117	9.5	121	8.7	-1.0	40	4,00
00:30	118	8.0	116	7.5	120	6.7	-1.2	42	4,00
00:45	119	9.0	117	8.5	121	7.7	-1.2	42	4,00
01:00	118	10.0	116	9.5	120	8.7	-1.1	42	4,00
01:15	117	11.0	115	10.5	119	9.7	-1.1	42	4,00
01:30	116	9.0	114	8.5	118	7.7	-1.1	43	4,00
01:45	116	10.0	114	9.5	118	8.7	-1.2	43	4,00
02:00	117	10.0	115	9.5	119	8.7	-1.2	45	4,00
02:15	117	8.0	115	7.5	119	6.7	-1.3	45	4,00
02:30	116	10.0	114	9.5	118	8.7	-1.2	46	4,00
02:45	116	9.0	114	8.5	118	7.7	-1.2	46	4,00
03:00	115	9.0	113	8.5	117	7.7	-1.0	46	4,00
03:15	115	9.0	113	8.5	117	7.7	-1.0	47	4,00
03:30	115	8.0	113	7.5	117	6.7	-1.0	48	4,00
03:45	114	8.0	112	7.5	116	6.7	-1.1	48	4,00
04:00	114	8.0	112	7.5	116	6.7	-1.1	50	4,00
04:15	115	8.0	113	7.5	117	6.7	-1.2	50	4,00
04:30	115	8.0	113	7.5	117	6.7	-1.2	52	4,00
04:45	115	8.0	113	7.5	117	6.7	-1.2	52	4,00
05:00	112	8.0	110	7.5	114	6.7	-1.3	52	4,00
05:15	112	8.0	110	7.5	114	6.7	-1.3	51	4,00
05:30	112	8.0	110	7.5	114	6.7	-1.3	51	4,00

SBGT	RB Vent	Mn Stack	TB Vent
CFM	CFM	CFM	CFM
ISOLATED	105,000	16,000	140,000
4,000	ISOLATED	20,000	140,000
4,000	ISOLATED	20,000	140,000
4,000	ISOLATED	20,000	140,000
4,000	ISOLATED	20,000	140,000
4,000	ISOLATED	20,000	140,000
4,000	ISOLATED	20,000	140,000
4,000	ISOLATED	20,000	140,000
4,000	ISOLATED	20,000	140,000
4,000	ISOLATED	20,000	140,000
4,000	ISOLATED	20,000	140,000
4,000	ISOLATED	20,000	140,000
4,000	ISOLATED	20,000	140,000
4,000	ISOLATED	20,000	140,000
4,000	ISOLATED	20,000	140,000
4,000	ISOLATED	20,000	140,000
4,000	ISOLATED	20,000	140,000
4,000	ISOLATED	20,000	140,000
4,000	ISOLATED	20,000	140,000
4,000	ISOLATED	20,000	140,000
4,000	ISOLATED	20,000	140,000
4,000	ISOLATED	20 000	140,000
4,000	ISOLATED	20,000	140,000
4,000	ISOLATED	20,000	140,000

Effluent Radiation Monitor Data

- ERM-1: MAIN STACK LOW (CPS)
- ERM-2: MAIN STACK HIGH (R/HR)
- ERM-3: RB VENT LOW (CPS)
- ERM-4: RB VENT HIGH (R/HR)

ERM-5: TB VENT HIGH (R/HR)

Time	ERM-1	ERM-2	ERM-3	ERM-4	ERM-5
00:00	1.50E+01	DS	2.00E+01	DS	DS
00:10	3.00E+01	DS	4.00E+01	DS	DS
00:15	4.50E+03	DS	3.00E+01	DS	DS
00:30	1.20E+03	DS	2.50E+01	DS	DS
00:45	2.00E+01	DS	2.00E+01	DS	DS
01:00	2.00E+01	DS	2.00E+01	DS	DS
01:15	2.00E+01	DS	2.00E+01	DS	DS
01:30	2.00E+01	DS	2.00E+01	DS	DS
01:45	2.00E+01	DS	2.00E+01	DS	DS
02:00	2.00E+01	DS	2.00E+01	DS	DS
02:15	2.00E+01	DS	2.00E+01	DS	DS
02:30	2.00E+01	DS	2.00E+01	DS	DS
02:45	2.00E+01	DS	2.00E+01	DS	DS
03:00	2.00E+01	DS	2.00E+01	DS	DS
03:15	1.00E+05	DS	2.00E+01	DS	DS
03:30	5.00E+05	DS	2.00E+01	DS	DS
03:45	5.00E+05	DS	2.00E+01	DS	DS
04:00	4.00E+05	DS	2.00E+01	DS	DS
04:15	4.00E+05	DS	2.00E+01	DS	DS
04:30	3.00E+05	DS	2.00E+01	DS	DS
04:45	1.00E+05	DS	2.00E+01	DS	DS
05:00	9.00E+04	DS	2.00E+01	DS	DS
05:15	8.50E+04	DS	2.00E+01	DS	DS
05:30	7.20E+04	DS	2.00E+01	DS	DS

Notes:

DS = Down Scale

Area Radiation Monitor Trend Data

1705-60 CI ARM-1 CO	Read in mR/ HARCOAL B ND. PUMP \$ EDWATER H	BED VAULT ARM-4 TURB FRONT STANDARD ARM-8 OUTSIDE TIP ROOM ARI STAIR ARM-5 RADWASTE CORRIDOR ARM-9 RADWASTE SHIP. LOCK ARI			ARM-12 NI ARM-13 SI	RM-11 NEW FUEL RACKS RM-12 NEW FUEL VAULT RM-13 SHIELD PLUG AREA RM-14 SPENT FUEL POOL AREA									
Time	1705-60	ARM-1	ARM-2	ARM-3	ARM-4	ARM-5	ARM-6	ARM-7	ARM-8	ARM-9	ARM-10	ARM-11	ARM-12	ARM-13	ARM-14
00:00	120.00	3.00	145.00	0.04	50.00	10.00	20.00	10.00	0.08	3.00	4.00	0.20	0.50	1.00	10.00
00:10	120.00	20.00	1500.00	0.04	500.00	10.00	20.00	10.00	0.08	3.00	4.00	0,20	0.50	1.00	10.00
00:15	120.00	10.00	950.00	0.04	380.00	10.00	20.00	10.00	8.00	3.00	40.00	0.20	0.50	0.90	10.00
00:30	115.00	8.00	640.00	0.04	220.00	10.00	20.00	10.00	8.00	3.00	40.00	0.20	0.50	0.90	10.00
00:45	115.00	2.00	5.00	0.04	2.00	10.00	20.00	10.00	8.00	3.00	40.00	0.20	0.50	0.90	10.00
01:00	115.00	2.00	4.00	0.04	1.00	10.00	20.00	10.00	8.00	3.00	40.00	0.20	0.50	0.90	10.00
01:15	115.00	2.00	4.00	0.04	1.00	10.00	20.00	10.00	8.00	3.00	40.00	0.20	0.50	0.90	10.00
01:30	115.00	2.00	4.00	0.04	1.00	10.00	20.00	10.00	8.00	3.00	40.00	0.20	0.50	0.90	10.00
01:45	115.00	2.00	4.00	0.04	1.00	10.00	20.00	10.00	8.00	3.00	40.00	0.20	0.50	0.90	10.00
02:00	115.00	2.00	4.00	0.04	1.00	10.00	20.00	10.00	8.00	3.00	40.00	0.20	0.50	0.90	10.00
02:15	115.00	2.00	4.00	0.04	1.00	10.00	20.00	10.00	8.00	3.00	40.00	0.20	0.50	0.90	10.00
02:30	115.00	2.00	4.00	0.04	1.00	10.00	20.00	10.00	8.00	3.00	40.00	0.20	0.50	0.90	10.00
02:45	115.00	2.00	4.00	0.04	1.00	10.00	20.00	10.00	8.00	3.00	40.00	0.20	0.50	0.90	10.00
03:00	115.00	2.00	4.00	0.04	1.00	10.00	20.00	10.00	8.00	3.00	40.00	0.20	0.50	0.90	10.00
03:15	115.00	2.00	4.00	0.04	1.00	10.00	20.00	10.00	OSH(>1E2)	3.00	OSH(>1E2)	0.20	0.50	0.90	10.00
03:30	115.00	2.00	4.00	0.04	1.00	10.00	20.00	10.00	OSH	3.00	OSH	0.20	0.50	0.90	10.00
03:45	115.00	2.00	4.00	0.04	1.00	10.00	20.00	10.00	OSH	3.00	OSH	0.20	0.50	0.90	10.00
04:00	115.00	2.00	4.00	0.04	1.00	10.00	20.00	10.00	OSH	3.00	OSH	0.20	0.50	0.90	10.00
04:15	115.00	2.00	4.00	0.04	1.00	10.00	20.00	10.00	OSH	3.00	OSH	0.20	0.50	0.90	10.00
04:30	115.00	2.00	4.00	0.04	1.00	10.00	20.00	10.00	OSH	3.00	OSH	0.20	0.50	0.90	10.00
04:45	115.00	2.00	4.00	0.04	1.00	10.00	20.00	10.00	OSH	3.00	OSH	0.20	0.50	0.90	10.00
05:00	115.00	2.00	4.00	0.04	1.00	10.00	20.00	10.00	OSH	3.00	OSH	0.20	0.50	0.90	10.00
05:15	115.00	2.00	4.00	0.04	1.00	10.00	20.00	10.00	OSH	3.00	OSH	0.20	0.50	0.90	10.00
05:30	115.00	2.00	4.00	0.04	1.00	10.00	20.00	10.00	OSH	3.00	OSH	0.20	0.50	0.90	10.00

Notes:

OSH = Off Scale High

Process Radiation Monitor Trend Data

PRM-1 MAIN STEAM LINE A mR/hr PRM-2 MAIN STEAM LINE B mR/hr PRM-3 MAIN STEAM LINE C mR/hr PRM-4 MAIN STEAM LINE D mR/hr

PRM-5 AIR EJECTOR OFF GAS mR/hr PRM-6 RBCCW LOOP A CPS PRM-7 RBCCW LOOP B CPS PRM-8 REFUEL FLOOR VENT mR/hr PRM-9 SBGT SYSTEM mR/hr PRM-10 CONTROL ROOM INTAKE mR/hr PRM-11 RADWASTE DISCH. CPS PRM-12 OG POST TREATMENT CPS PRM-13 DRYWELL CHRMS A R/hr PRM-14 DRYWELL CHRMS B R/hr PRM-15 TORUS CHRMS A R/hr PRM-16 TORUS CHRMS B R/hr

Time	PRM-1	PRM-2	PRM-3	PRM-4	PRM-5	PRM-6	PRM-7	PRM-8	PRM-9	PRM-10	PRM-11	PRM-12	PRM-13	PRM-14	PRM-15	PRM-16
00:00	2.65E+03	3.40E+03	3.05E+03	2.55E+03	4.00E+01	2.50E+02	1.50E+02	5.00E+00	3.00E+00	5.00E-02	1.00E+02	2.00E+02	2.50E+00	2.80E+00	DS	DS
00:10	3.30E+04	4.20E+04	4.20E+04	3.30E+04	3.00E+04	1.50E+04	1.80E+04	5.00E+00	3.00E+00	5.00E-02	1.00E+02	4.50E+04	1.20E+00	1.20E+00	1.10E+00	1.10E+00
00:15	2.80E+04	4.00E+04	4.00E+04	2.80E+04	2.40E+04	1.20E+04	1.60E+04	5.00E+00	8.00E+00	5.00E-02	1.00E+02	1.30E+05	1.00E+00	5.00E+00	1.00E+00	2.00E+00
00:30	1.27E+04	1.62E+04	1.65E+04	1.27E+04	1.20E+04	1.10E+04	1.50E+04	5.00E+00	3.00E+00	5.00E-02	1.00E+02	6.85E+04	1.00E+00	1.00E+01	1.00E+00	4.00E+00
00:45	9.50E+01	1.25E+02	1.15E+02	9.50E+01	5.00E+01	1.00E+04	1.47E+04	5.00E+00	3.00E+00	5.00E-02	1.00E+02	4.00E+02	1.00E+00	3.00E+01	1.00E+00	8.00E+00
01:00	1.50E+01	1.80E+01	1.20E+01	1.40E+01	4.50E+01	9.90E+03	1.35E+04	5.00E+00	3.00E+00	5.00E-02	1.00E+02	4.00E+02	1.00E+00	9.00E+01	1.00E+00	9.00E+00
01:15	1.50E+01	1.80E+01	1.20E+01	1.40E+01	4.50E+01	9.00E+03	1.20E+04	5.00E+00	3.00E+00	5.00E-02	1.00E+02	4.00E+02	1.00E+00	1.20E+02	1.00E+00	1.00E+01
01:30	1.50E+01	1.80E+01	1.20E+01	1.40E+01	4.50E+01	8.20E+03	1.00E+04	5.00E+00	3.00E+00	5.00E-02	1.00E+02	4.00E+02	1.00E+00	1.50E+02	1.00E+00	1.50E+01
01:45	1.50E+01	1.80E+01	1.20E+01	1.40E+01	4.50E+01	7.70E+03	9.00E+03	5.00E+00	3.00E+00	5.00E-02	1.00E+02	4.00E+02	1.00E+00	1.80E+02	1.00E+00	2.00E+01
02:00	1.50E+01	1.80E+01	1.20E+01	1.40E+01	4.50E+01	6.70E+03	8.50E+03	5.00E+00	3.00E+00	5.00E-02	1.00E+02	4.00E+02	1.00E+00	2.30E+02	1.00E+00	2.50E+01
02:15	1.50E+01	1.80E+01	1.20E+01	1.40E+01	4.50E+01	6.40E+03	8.40E+03	5.00E+00	3.00E+00	5.00E-02	1.00E+02	4.00E+02	1.00E+00	2.80E+02	1.00E+00	2.80E+01
02:30	1.50E+01	1.80E+01	1.20E+01	1.40E+01	4.50E+01	5.80E+03	7.00E+03	5.00E+00	3.00E+00	5.00E-02	1.00E+02	4.00E+02	1.00E+00	3.30E+02	1.00E+00	3.00E+01
02:45	1.50E+01	1.80E+01	1.20E+01	1.40E+01	4.50E+01	5.20E+03	6.80E+03	5.00E+00	3.00E+00	5.00E-02	1.00E+02	4.00E+02	1.00E+00	3.50E+02	1.00E+00	3.50E+01
03:00	1.50E+01	1.80E+01	1.20E+01	1.40E+01	4.50E+01	2.80E+03	5.60E+03	5.00E+00	3.00E+00	5.00E-02	1.00E+02	4.00E+02	1.00E+00	3.60E+02	1.00E+00	3.80E+01
03:15	1.50E+01	1.80E+01	1.20E+01	1.40E+01	4.50E+01	1.80E+03	4.40E+03	5.00E+00	2.00E+02	5.00E-02	1.00E+02	4.00E+02	1.00E+00	3.80E+02	1.00E+00	4.00E+01
03:30	1.50E+01	1.80E+01	1.20E+01	1.40E+01	4.50E+01	1.50E+03	3.50E+03	5.00E+00	4.00E+02	5.00E-02	1.00E+02	4.00E+02	1.00E+00	3.80E+02	1.00E+00	4.00E+01
03:45	1.50E+01	1.80E+01	1.20E+01	1.40E+01	4.50E+01	1.20E+03	2.00E+03	5.00E+00	7.00E+02	5.00E-02	1.00E+02	4.00E+02	1.00E+00	3.80E+02	1.00E+00	4.00E+01
04:00	1.50E+01	1.80E+01	1.20E+01	1.40E+01	4.50E+01	8.00E+02	1.50E+03	5.00E+00	8.00E+02	5.00E-02	1.00E+02	4.00E+02	1.00E+00	3.80E+02	1.00E+00	4.00E+01
04:15	1.50E+01	1.80E+01	1.20E+01	1.40E+01	4.50E+01	8.00E+02	1.50E+03	5.00E+00	8.00E+02	5.00E-02	1.00E+02	4.00E+02	1.00E+00	3.80E+02	1.00E+00	4.00E+01
04:30	1.50E+01	1.80E+01	1.20E+01	1.40E+01	4.50E+01	8.00E+02	1.50E+03	5.00E+00	8.00E+02	5.00E-02	1.00E+02	4.00E+02	1.00E+00	3.80E+02	1.00E+00	4.00E+01
04:45	1.50E+01	1.80E+01	1.20E+01	1.40E+01	4.50E+01	8.00E+02	1.50E+03	5.00E+00	8.00E+02	5.00E-02	1.00E+02	4.00E+02	1.00E+00	3.80E+02	1.00E+00	4.00E+01
05:00	1.50E+01	1.80E+01	1.20E+01	1.40E+01	4.50E+01	8.00E+02	1.50E+03	5.00E+00	8.00E+02	ិ 00E-02	1.00E+02	4.00E+02	1.00E+00	3.80E+02	1.00E+00	4.00E+01
05:15	1.50E+01	1.80E+01	1.20E+01	1.40E+01	4.50E+01	8.00E+02	1.50E+03	5.00E+00	8.00E+02	5.00E-02	1.00E+02	4.00E+02	1.00E+00	3.80E+02	1.00E+00	4.00E+01
05:30	1.50E+01	1.80E+01	1.20E+01	1.40E+01	4.50E+01	8.00E+02	1.50E+03	5.00E+00	8.00E+02	5.00E-02	1.00E+02	4.00E+02	1.00E+00	3.80E+02	1.00E+00	4.00E+01

Notes:

DS = Down Scale

	AREA RADIATIO	ON M	ONITORS	TIME:	0:00
PANEL/ID NO.	MONITOR	TREND	READING	ALARM IN	RANGE
C910/1705-60	Charcoal Vault Area AOG		120.0 mR/Hr		10 ⁻¹ - 10 ⁴
C911/ARM-1	Cond. Pump Stairway		3.0 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-2	Feedwater Heaters		145.0 mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-3	Main Control Room		0.0 mR/Hr		10 ⁻² - 10 ²
C911/ARM-4	Turbine-Front Standard		<u>50.0</u> mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-5	Radwaste-Corridor		<u>10.0</u> mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-6	Radwaste-Sump Area		20.0 mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-7	Chem. Waste Tank		<u>10.0</u> mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-8	Rx-Outside TIP Room		0.1 mR/Hr		10 ⁻² - 10 ²
C911/ARM-9	Radwaste Shipping Lock		3.0 mR/Hr		10 ⁻² - 10 ²
C911/ARM-10	Rx Access Area (S.E.)		4.0 mR/Hr		10 ⁻² - 10 ²
C911/ARM-11	New Fuel Racks		0.2 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-12	New Fuel Vault		0.5 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-13	Shield Plug Area		1.0 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-14	Spent Fuel Pool Area		<u> </u>		10 ⁻¹ - 10 ³
	ARM-2} ARM-3} ARM-4} ARM-5}	55 mR/Hr 600 mR/H	ARM-8 r ARM-9 ARM-10 r ARM-11 ARM-12 Hr ARM-13	 300 mR/H 5 mR/Hr 50 mR/Hr 60 mR/Hr 6 mR/Hr 40 mR/Hr 40 mR/Hr 30 mR/Hr 	r

OOS -- Out of Service OSH -- Off Scale Hi DS -- Down Scale

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AREA RADIATIC	ON MO	DNITORS	TIME:	00:10
MONITOR	TREND	READING	ALARM IN	RANGE
Charcoal Vault Area AOG		120.0 mR/Hr		10 ⁻¹ - 10 ⁴
Cond. Pump Stairway		20.0 mR/Hr		10 ⁻¹ - 10 ³
Feedwater Heaters		1500.0 mR/Hr	X	10 ⁰ - 10 ⁴
Main Control Room	<u> </u>	0.04 mR/Hr		10 ⁻² - 10 ²
Turbine-Front Standard		500.0 mR/Hr	X	10 ⁰ - 10 ⁴
Radwaste-Corridor		10.0 mR/Hr		10 ⁻¹ - 10 ³
Radwaste-Sump Area		20.0 mR/Hr		10 ⁰ - 10 ⁴
Chem. Waste Tank	<u> </u>	10.0 mR/Hr		10 ⁰ - 10 ⁴
Rx-Outside TIP Room		0.1 mR/Hr		10 ⁻² - 10 ²
Radwaste Shipping Lock		<u>3.0</u> mR/Hr		10 ⁻² - 10 ²
Rx Access Area (S.E.)		4.0 mR/Hr		10 ⁻² - 10 ²
New Fuel Racks		0.2 mR/Hr		10 ⁻¹ - 10 ³
New Fuel Vault		0.5 mR/Hr		10 ⁻¹ - 10 ³
Shield Plug Area		<u>1.0</u> mR/Hr		10 ⁻¹ - 10 ³
Spent Fuel Pool Area		10.0 mR/Hr		10 ⁻¹ - 10 ³
ARM-1} 55 ARM-2} 60 ARM-3} 1 ARM-4} 45 ARM-5} 15	5 mR/Hr 00 mR/Hr mR/Hr 50 mR/Hr 5 mR/Hr	ARM-8 ARM-9 ARM-10 ARM-11 ARM-11	} 5 mR/Hr } 50 mR/Hr } 60 mR/Hr } 6 mR/Hr } 40 mR/Hr	r
	MONITOR Charcoal Vault Area AOG Cond. Pump Stairway Feedwater Heaters Main Control Room Turbine-Front Standard Radwaste-Corridor Radwaste-Sump Area Chem. Waste Tank Rx-Outside TIP Room Radwaste Shipping Lock Rx Access Area (S.E.) New Fuel Racks New Fuel Vault Shield Plug Area Spent Fuel Pool Area 1705-60} 2 ARM-1] 5 ARM-2] 64 ARM-3] 1 ARM-4] 44 ARM-5] 12	MONITOR TREND Charcoal Vault Area AOG	Charcoal Vault Area AOG 120.0 mR/Hr Cond. Pump Stairway 20.0 mR/Hr Feedwater Heaters 1500.0 mR/Hr Main Control Room 0.04 mR/Hr Turbine-Front Standard 500.0 mR/Hr Radwaste-Corridor 10.0 mR/Hr Radwaste-Sump Area 20.0 mR/Hr Radwaste-Sump Area 20.0 mR/Hr Radwaste-Sump Area 0.0 mR/Hr Radwaste-Sump Area 0.0 mR/Hr Radwaste Shipping Lock 3.0 mR/Hr Rx Access Area (S.E.) 4.0 mR/Hr New Fuel Racks 0.2 mR/Hr New Fuel Racks 0.2 mR/Hr Spent Fuel Pool Area 10.0 mR/Hr ARM-1 55 mR/Hr ARM-2 600 mR/Hr ARM-3 ARM-3 1 mR/Hr ARM-11 ARM-3 15 mR/Hr ARM-11 ARM-3 15 mR/Hr ARM-11 ARM-3 15 mR/Hr ARM-11 ARM-3 15 mR/Hr ARM-11 ARM-4 450 mR/Hr ARM-11 ARM-5 15 mR/Hr ARM-11 ARM-5 15 mR/Hr ARM-11 <	MONITOR TREND READING ALARM IN Charcoal Vault Area AOG 120.0 mR/Hr Image: Cond. Pump Stairway 20.0 mR/Hr Image: Cond. Pump Stairway Cond. Pump Stairway 20.0 mR/Hr Image: Cond. Pump Stairway 20.0 mR/Hr Image: Cond. Pump Stairway Feedwater Heaters 1500.0 mR/Hr Image: Cond. Pump Stairway 20.0 mR/Hr Image: Cond. Pump Stairway Feedwater Heaters 1500.0 mR/Hr Image: Cond. Pump Stairway Image: Cond. Pump Stairway Image: Cond. Pump Stairway Turbine-Front Standard 500.0 mR/Hr Image: Cond. Pump Stairway Image: Cond. Pump Stairway Image: Cond. Pump Stairway Turbine-Front Standard 500.0 mR/Hr Image: Cond. Pump Stairway Image: Cond. Pump Stairway Image: Cond. Pump Stairway Turbine-Front Standard 500.0 mR/Hr Image: Cond. Pump Stairway Image: Cond. Pump Stairway Image: Cond. Pump Stairway Turbine-Front Standard 10.0 mR/Hr Image: Cond. Pump Stairway Image: Cond. Pump Stairway Image: Cond. Pump Stairway Image: Cond. Pump Stairway Radwaste-Corridor 10.1 mR/Hr Image: Cond. Pump Stairway Image: Cond. Pump Stairway Image: Cond. Pump Stairway Image: Cond. Pump Stairway Radwaste Shipping Lock 3.0 mR/Hr Image: Cond. Pump Stairway Image: Cond. Pump Stairway Image: Cond. P

OOS -- Out of Service OSH -- Off Scale Hi DS -- Down Scale

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Same and

	AREA RADIATI	ON MO	ONITORS	TIME: 0:15
PANEL/ID NO.	MONITOR	TREND	READING	ALARM IN RANGE
C910/1705-60	Charcoal Vault Area AOG		<u>120.0</u> mR/Hr	10 ⁻¹ - 10 ⁴
C911/ARM-1	Cond. Pump Stairway		<u>10.0</u> mR/Hr	10 ⁻¹ - 10 ³
C911/ARM-2	Feedwater Heaters		950.0 mR/Hr	X 10 ⁰ - 10 ⁴
C911/ARM-3	Main Control Room		0.04 mR/Hr	10 ⁻² - 10 ²
C911/ARM-4	Turbine-Front Standard		<u>380.0</u> mR/Hr	X 10 ⁰ - 10 ⁴
C911/ARM-5	Radwaste-Corridor		10.0 mR/Hr	10 ⁻¹ - 10 ³
C911/ARM-6	Radwaste-Sump Area		20.0 mR/Hr	10 ⁰ - 10 ⁴
C911/ARM-7	Chem. Waste Tank		10.0 mR/Hr	10 ⁰ - 10 ⁴
C911/ARM-8	Rx-Outside TIP Room		8.0 mR/Hr	X 10 ⁻² - 10 ²
C911/ARM-9	Radwaste Shipping Lock		3.0 mR/Hr	10 ⁻² - 10 ²
C911/ARM-10	Rx Access Area (S.E.)		40.0 mR/Hr	10 ⁻² - 10 ²
C911/ARM-11	New Fuel Racks		0.2 mR/Hr	10⁻¹ - 10³
C911/ARM-12	New Fuel Vault		0.5 mR/Hr	10 ⁻¹ - 10 ³
C911/ARM-13	Shield Plug Area		0.9 mR/Hr	10 ⁻¹ - 10 ³
C911/ARM-14	Spent Fuel Pool Area		10.0 mR/Hr	10 ⁻¹ - 10 ³
	ARM-1} ARM-2} ARM-3} ARM-4} ARM-5}	200 mR/Hr 55 mR/Hr 600 mR/Hr 1 mR/Hr 450 mR/Hr 15 mR/Hr 6000 mR/H	ARM-8 ARM-9 ARM-10 ARM-11 ARM-12 r ARM-13	7} 300 mR/Hr 3} 5 mR/Hr 3} 50 mR/Hr 3} 60 mR/Hr 1} 6 mR/Hr 2} 40 mR/Hr 3} 40 mR/Hr 4} 30 mR/Hr
	OOS Out of Service	OSH Off		wn Scale

	AREA RADIATI	ON MO	ONITORS	TIME: 0:30
PANEL/ID NO.	MONITOR	TREND	READING	ALARM IN RANGE
C910/1705-60	Charcoal Vault Area AOG		<u>115.0</u> mR/Hr	10 ⁻¹ - 10 ⁴
C911/ARM-1	Cond. Pump Stairway	· 🗔 .	8.0 mR/Hr	10 ⁻¹ - 10 ³
C911/ARM-2	Feedwater Heaters		640.0 mR/Hr	X 10 ⁰ - 10 ⁴
C911/ARM-3	Main Control Room		0.04 mR/Hr	10 ⁻² - 10 ²
C911/ARM-4	Turbine-Front Standard		220.0 mR/Hr	10 [°] - 10 ⁴
C911/ARM-5	Radwaste-Corridor		<u>10.0</u> mR/Hr	10 ⁻¹ - 10 ³
C911/ARM-6	Radwaste-Sump Area		20.0 mR/Hr	10 ⁰ - 10 ⁴
C911/ARM-7	Chem. Waste Tank		<u>10.0</u> mR/Hr	10 ⁰ - 10 ⁴
C911/ARM-8	Rx-Outside TIP Room		8.0 mR/Hr	X $10^{-2} - 10^2$
C911/ARM-9	Radwaste Shipping Lock		<u>3.0</u> mR/Hr	10 ⁻² - 10 ²
C911/ARM-10	Rx Access Area (S.E.)		<u>40.0</u> mR/Hr	10 ⁻² - 10 ²
C911/ARM-11	New Fuel Racks		0.2 mR/Hr	10 ⁻¹ - 10 ³
C911/ARM-12	New Fuel Vault		0.5 mR/Hr	10 ⁻¹ - 10 ³
C911/ARM-13	Shield Plug Area		0.9 mR/Hr	10 ⁻¹ - 10 ³
C911/ARM-14	Spent Fuel Pool Area		<u>10.0</u> mR/Hr	10 ⁻¹ - 10 ³
	ARM-1} ARM-2} ARM-3} ARM-4} ARM-5}	200 mR/Hr 55 mR/Hr 600 mR/Hr 1 mR/Hr 450 mR/Hr 15 mR/Hr 6000 mR/H	ARM- ARM-1 ARM-1 ARM-1 ARM-1 ARM-1	7} 300 mR/Hr 8} 5 mR/Hr 9} 50 mR/Hr 0} 60 mR/Hr 1} 6 mR/Hr 2} 40 mR/Hr 3} 40 mR/Hr 4} 30 mR/Hr
	OOS Out of Service	OSH Off	f Scale Hi DS Do	own Scale

 $\sum_{i=1}^{n} (i,j) = \sum_{i=1}^{n} (i,j) = \sum_{i$

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	AREA RADIATION	N MONITO	RS	TIME:	0:45
PANEL/ID NO.	MONITOR T	REND READING	6	ALARM IN	RANGE
C910/1705-60	Charcoal Vault Area AOG	115.0	mR/Hr		10 ⁻¹ - 10 ⁴
C911/ARM-1	Cond. Pump Stairway	2.	mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-2	Feedwater Heaters	5.	mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-3	Main Control Room	0.04	mR/Hr		10 ⁻² - 10 ²
C911/ARM-4	Turbine-Front Standard	2.0	mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-5	Radwaste-Corridor		mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-6	Radwaste-Sump Area	20.0)_mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-7	Chean. Waste Tank	10.0	mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-8	Rx-Outside TIP Room		_mR/Hr	X	10 ⁻² - 10 ²
C911/ARM-9	Radwaste Shipping Lock	3.0	mR/Hr		10 ⁻² - 10 ²
C911/ARM-10	Rx Access Area (S.E.)	40.0	mR/Hr		10 ⁻² - 10 ²
C911/ARM-11	New Fuel Racks	0.2	mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-12	New Fuel Vault	0.5	mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-13	Shield Plug Area	0.9	mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-14	Spent Fuel Pool Area	10.0	mR/Hr		10 ⁻¹ - 10 ³
	1705-60} 200 ARM-1} 55 (ARM-2} 600 ARM-3} 1 m ARM-4} 450 ARM-5} 15 (ARM-6} 600	mR/Hr) mR/Hr hR/Hr) mR/Hr mR/Hr	ARM-8} ARM-9} ARM-10} ARM-11} ARM-12} ARM-13}	300 mR/Hr 5 mR/Hr 50 mR/Hr 60 mR/Hr 6 mR/Hr 40 mR/Hr 40 mR/Hr 30 mR/Hr	r
	OOS Out of Service OS	H Off Scale Hi	DS Dow		

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	AREA RADIATIO	ON MO	NITORS	TIME:	1:00
PANEL/ID NO.	MONITOR	TREND	READING	ALARM IN	RANGE
C910/1705-60	Charcoal Vault Area AOG		115.0 mR/Hr		10 ⁻¹ - 10 ⁴
C911/ARM-1	Cond. Pump Stairway		2.0 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-2	Feedwater Heaters		4.0 mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-3	Main Control Room		0.04 mR/Hr		10 ⁻² - 10 ²
C911/ARM-4	Turbine-Front Standard		1.0 mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-5	Radwaste-Corridor		10.0 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-6	Radwaste-Sump Area		20.0 mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-7	Chem. Waste Tank		<u>10.0</u> mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-8	Rx-Outside TIP Room		8.0 mR/Hr	X	10 ⁻² - 10 ²
C911/ARM-9	Radwaste Shipping Lock		3.0 mR/Hr		10 ⁻² - 10 ²
C911/ARM-10	Rx Access Area (S.E.)		40.0 mR/Hr		10 ⁻² - 10 ²
C911/ARM-11	New Fuel Racks		0.2 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-12	New Fuel Vault		0.0 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-13	Shield Plug Area		0.9 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-14	Spent Fuel Pool Area		10.0 mR/Hr		10 ⁻¹ - 10 ³
	ARM-1} ARM-2} ARM-3} ARM-4} ARM-5} 1	200 mR/Hr 55 mR/Hr 600 mR/Hr 1 mR/Hr 450 mR/Hr 15 mR/Hr 6000 mR/Hr	ARM-8 ARM-9 ARM-10 ARM-11 ARM-12 ARM-13	 300 mR/Hr 5 mR/Hr 50 mR/Hr 60 mR/Hr 6 mR/Hr 40 mR/Hr 40 mR/Hr 30 mR/Hr 	
	OOS Out of Service	OSH Off S	cale Hi DS Dov	wn Scale	

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	AREA RADIATIO	ON MOI	NITORS	TIME:	1:15
PANEL/ID NO.	MONITOR	TREND F	READING	ALARM IN	RANGE
C910/1705-60	Charcoal Vault Area AOG		115.0 mR/Hr]10 ⁻¹ - 10 ⁴
C911/ARM-1	Cond. Pump Stairway		2.0 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-2	Feedwater Heaters		4.0 mR/Hr		10 ⁰ - 10⁴
C911/ARM-3	Main Control Room		0.04 mR/Hr		10 ⁻² - 10 ²
C911/ARM-4	Turbine-Front Standard		1.0 mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-5	Radwaste-Corridor		10.0 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-6	Radwaste-Sump Area		20.0 mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-7	Chem. Waste Tank		10.0 mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-8	Rx-Outside TIP Room		8.0 mR/Hr	X	10 ⁻² - 10 ²
C911/ARM-9	Radwaste Shipping Lock		3.0 mR/Hr		10 ⁻² - 10 ²
C911/ARM-10	Rx Access Area (S.E.)		40.0 mR/Hr		10 ⁻² - 10 ²
C911/ARM-11	New Fuel Racks		0.2 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-12	New Fuel Vault		0.5 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-13	Shield Plug Area		0.9 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-14	Spent Fuel Pool Area		10.0 mR/Hr		10 ⁻¹ - 10 ³
	ARM-3} 1 ARM-4} 4 ARM-5} 1	55 mR/Hr 600 mR/Hr I mR/Hr I50 mR/Hr	ARM-8 ARM-9 ARM-10 ARM-11 ARM-12 ARM-13	 300 mR/Hi 5 mR/Hr 50 mR/Hr 60 mR/Hr 6 mR/Hr 40 mR/Hr 40 mR/Hr 30 mR/Hr 	r
	OOS Out of Service C	OSH Off Sc	ale Hi DS Dov	wn Scale	

	AREA RADIATION MONITORS TIME: 1:
PANEL/ID NO.	MONITOR TREND READING ALARM IN RANGE
C910/1705-60	Charcoal Vault Area AOG115.0 mR/Hr10 ⁻¹ - 10
C911/ARM-1	Cond. Pump Stairway 2.0 mR/Hr 10 ⁻¹ - 10
C911/ARM-2	Feedwater Heaters 4.0 mR/Hr 10 ⁰ - 10 ⁴
C911/ARM-3	Main Control Room0.04 mR/Hr10 ⁻² - 10 ⁻
C911/ARM-4	Turbine-Front Standard 1.0 mR/Hr 10 ⁰ - 10 ⁴
C911/ARM-5	Radwaste-Corridor 10.0 mR/Hr 10 ⁻¹ - 10 ⁻¹
C911/ARM-6	Radwaste-Sump Area 20.0 mR/Hr 10 ⁰ - 10 ⁴
C911/ARM-7	Chem. Waste Tank 10.0 mR/Hr 10 ⁰ - 10 ⁴
C911/ARM-8	Rx-Outside TIP Room 8.0 mR/Hr X 10 ⁻² - 10 ²
C911/ARM-9	Radwaste Shipping Lock 3.0 mR/Hr 10 ⁻² - 10 ²
C911/ARM-10	Rx Access Area (S.E.) 40.0 mR/Hr 10 ⁻² - 10 ²
C911/ARM-11	New Fuel Racks 0.2 mR/Hr 10 ⁻¹ - 10 ³
C911/ARM-12	New Fuel Vault 0.5 mR/Hr 10 ⁻¹ - 10 ³
C911/ARM-13	Shield Plug Area 0.9 mR/Hr 10 ⁻¹ - 10 ³
C911/ARM-14	Spent Fuel Pool Area10.0 mR/Hr10 ⁻¹ - 10 ³
	1705-60} 200 mR/Hr ARM-7} 300 mR/Hr ARM-1} 55 mR/Hr ARM-8} 5 mR/Hr ARM-2} 600 mR/Hr ARM-9} 50 mR/Hr ARM-3} 1 mR/Hr ARM-10} 60 mR/Hr ARM-4} 450 mR/Hr ARM-11} 6 mR/Hr ARM-5} 15 mR/Hr ARM-12} 40 mR/Hr ARM-6} 6000 mR/Hr ARM-13} 40 mR/Hr ARM-6} 30 mR/Hr ARM-14} 30 mR/Hr
	OOS Out of Service OSH Off Scale Hi DS Down Scale

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	AREA RADIATI	ON MO	ONITORS	TIME: 1	:45
PANEL/ID NO.	MONITOR	TREND	READING		E
C910/1705-60	Charcoal Vault Area AOG		115.0 mR/Hr	10 ⁻¹ - 1	0 ⁴
C911/ARM-1	Cond. Pump Stairway		2.0 mR/Hr	10 ⁻¹ - 1	0 ³
C911/ARM-2	Feedwater Heaters		4.0 mR/Hr	10 ⁰ - 10	0 ⁴
C911/ARM-3	Main Control Room		0.04 mR/Hr	10 ⁻² - 1	0 ²
C911/ARM-4	Turbine-Front Standard		<u> </u>	10 ⁰ - 10	0 ⁴
C911/ARM-5	Radwaste-Corridor		10.0 mR/Hr	10 ⁻¹ - 1	0 ³
C911/ARM-6	Radwaste-Sump Area		20.0 mR/Hr	10 ⁰ - 10	D ⁴
C911/ARM-7	Chem. Waste Tank		10.0 mR/Hr	10 ⁰ - 10	D4
C911/ARM-8	Rx-Outside TIP Room		8.0 mR/Hr	X 10 ⁻² - 10	0 ²
C911/ARM-9	Radwaste Shipping Lock		<u>3.0</u> mR/Hr	10 ⁻² - 10	0 ²
C911/ARM-10	Rx Access Area (S.E.)		40.0 mR/Hr	10⁻² - 1 0	0 ²
C911/ARM-11	New Fuel Racks		0.2 mR/Hr	10 ⁻¹ - 10	0 ³
C911/ARM-12	New Fuel Vault		0.5 mR/Hr	10 ⁻¹ - 10	0 ³
C911/ARM-13	Shield Plug Area		0.9 mR/Hr	10 ⁻¹ - 10	0 ³
C911/ARM-14	Spent Fuel Pool Area		<u>10.0</u> mR/Hr	10⁻¹ - 1	0 ³
	ARM-1} ARM-2} ARM-3} ARM-4} ARM-5}	200 mR/Hr 55 mR/Hr 600 mR/Hr 1 mR/Hr 450 mR/Hr 15 mR/Hr 6000 mR/H	ARM- ARM-1 ARM-1 ARM-1 ARM-1 ARM-1	7} 300 mR/Hr 8} 5 mR/Hr 9} 50 mR/Hr 0} 60 mR/Hr 1} 6 mR/Hr 2} 40 mR/Hr 3} 40 mR/Hr 4} 30 mR/Hr	
	OOS Out of Service	OSH Off	f Scale Hi DS Do	wn Scale	

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	AREA RADIATIC	ON MONITORS	TIME: 2:00
PANEL/ID NO.	MONITOR	TREND READING	ALARM IN RANGE
C910/1705-60	Charcoal Vault Area AOG	115.0 mR/	Hr 10 ⁻¹ - 10 ⁴
C911/ARM-1	Cond. Pump Stairway	2.0 mR/	Hr 10 ⁻¹ - 10 ³
C911/ARM-2	Feedwater Heaters	4.0 mR/	Hr 10 ⁰ - 10 ⁴
C911/ARM-3	Main Control Room	0.04 mR/	Hr 10 ⁻² - 10 ²
C911/ARM-4	Turbine-Front Standard	1.0 mR/	Hr 10 ⁰ - 10 ⁴
C911/ARM-5	Radwaste-Corridor	10.0 mR/	Hr 10 ⁻¹ - 10 ³
C911/ARM-6	Radwaste-Sump Area	20.0 mR/	Hr 10 ⁰ - 10 ⁴
C911/ARM-7	Chem. Waste Tank	10.0 mR/l	Hr 10 ⁰ - 10 ⁴
C911/ARM-8	Rx-Outside TIP Room	8.0 mR/l	Hr X 10 ⁻² - 10 ²
C911/ARM-9	Radwaste Shipping Lock	3.0 mR/l	Hr 10 ⁻² - 10 ²
C911/ARM-10	Rx Access Area (S.E.)	40.0 mR/l	Hr 10 ⁻² - 10 ²
C911/ARM-11	New Fuel Racks	0.2 mR/l	Hr 10 ⁻¹ - 10 ³
C911/ARM-12	New Fuel Vault	0.5 mR/l	Hr 10 ⁻¹ - 10 ³
C911/ARM-13	Shield Plug Area	0.9 mR/l	Hr 10 ⁻¹ - 10 ³
C911/ARM-14	Spent Fuel Pool Area	10.0 mR/i	Hr 10 ⁻¹ - 10 ³
	ARM-3} 1 ARM-4} 4 ARM-5} 1	5 mR/Hr AF 00 mR/Hr AF mR/Hr AR 50 mR/Hr AR 5 mR/Hr AR 000 mR/Hr AR	RM-7} 300 mR/Hr RM-8} 5 mR/Hr RM-9} 50 mR/Hr M-10} 60 mR/Hr M-11} 6 mR/Hr M-12} 40 mR/Hr M-13} 40 mR/Hr M-14} 30 mR/Hr
	OOS Out of Service C)SH Off Scale Hi DS	- Down Scale

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	AREA RADIATIO	ON MON	NITORS	TIME:	2:15
PANEL/ID NO.	MONITOR	TREND R	EADING		RANGE
C910/1705-60	Charcoal Vault Area AOG	\Box	<u>115.0</u> mR/Hr		10 ⁻¹ - 10 ⁴
C911/ARM-1	Cond. Pump Stairway		2.0 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-2	Feedwater Heaters		4.0 mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-3	Main Control Room		0.04 mR/Hr		10 ⁻² - 10 ²
C911/ARM-4	Turbine-Front Standard		1.0 mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-5	Radwaste-Corridor		10.0 mR/Hr	1	10 ⁻¹ - 10 ³
C911/ARM-6	Radwaste-Sump Area		20.0 mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-7	Chem. Waste Tank		10.0 mR/Hr	1	0 ⁰ - 10 ⁴
C911/ARM-8	Rx-Outside TIP Room		8.0 mR/Hr	X 1	0 ⁻² - 10 ²
C911/ARM-9	Radwaste Shipping Lock		3.0 mR/Hr	1	0 ⁻² - 10 ²
C911/ARM-10	Rx Access Area (S.E.)		40.0 mR/Hr	1	0 ⁻² - 10 ²
C911/ARM-11	New Fuel Racks		0.2 mR/Hr	1	0 ⁻¹ - 10 ³
C911/ARM-12	New Fuel Vault		0.5 mR/Hr	1	0 ⁻¹ - 10 ³
C911/ARM-13	Shield Plug Area		0.9 mR/Hr	1	0 ⁻¹ - 10 ³
C911/ARM-14	Spent Fuel Pool Area		10.0 mR/Hr	1	0 ⁻¹ - 10 ³
	ARM-1) 4 ARM-2) 0 ARM-3} 4 ARM-4} 4 ARM-5} 4	200 mR/Hr 55 mR/Hr 600 mR/Hr 1 mR/Hr 450 mR/Hr 15 mR/Hr 6000 mR/Hr	ARM-8 ARM-9 ARM-10 ARM-11 ARM-12 ARM-13	7} 300 mR/Hr 3} 5 mR/Hr 3} 50 mR/Hr 3} 60 mR/Hr 4} 6 mR/Hr 2} 40 mR/Hr 3} 40 mR/Hr 4} 30 mR/Hr	
	OOS Out of Service	OSH Off Sca	ale Hi DS Do	wn Scale	

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	AREA RADIATI	ON MC	NITORS	TIME:	2:30
PANEL/ID NO.	MONITOR	TREND	READING	ALARM IN	RANGE
C910/1705-60	Charcoal Vault Area AOG		115.0 mR/Hr		10 ⁻¹ - 10 ⁴
C911/ARM-1	Cond. Pump Stairway		2.0 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-2	Feedwater Heaters		4.0 mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-3	Main Control Room		0.04 mR/Hr		10 ⁻² - 10 ²
C911/ARM-4	Turbine-Front Standard		1.0 mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-5	Radwaste-Corridor		10.0 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-6	Radwaste-Sump Area		20.0 mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-7	Chem. Waste Tank		10.0 mR#fr		10 ⁰ - 10 ⁴
C911/ARM-8	Rx-Outside TIP Room		8.0 mR/Hr	X	10 ⁻² - 10 ²
C911/ARM-9	Radwaste Shipping Lock		3.0 mR/Hr		10 ⁻² - 10 ²
C911/ARM-10	Rx Access Area (S.E.)		40.0 mR/Hr		10 ⁻² - 10 ²
C911/ARM-11	New Fuel Racks		0.2 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-12	New Fuel Vault		0.5 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-13	Shield Plug Area		0.9 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-14	Spent Fuel Pool Area		<u>10.0</u> mR/Hr		10 ⁻¹ - 10 ³
	ARM-1} ARM-2} ARM-3} ARM-4} ARM-5}	200 mR/Hr 55 mR/Hr 600 mR/Hr 1 mR/Hr 450 mR/Hr 15 mR/Hr 6000 mR/Hr	ARM-3 ARM-10 ARM-11 ARM-12 ARM-12 ARM-13	7} 300 mR/H 8} 5 mR/Hr 9} 50 mR/Hr 0} 60 mR/Hr 1} 6 mR/Hr 2} 40 mR/Hr 3} 40 mR/Hr 4} 30 mR/Hr	r
	OOS Out of Service	OSH Off S	Scale Hi DS Do	wn Scale	

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	AREA RADIATI	ON MO	NITORS	TIME: 2:45
PANEL/ID NO.	MONITOR	TREND	READING	ALARM IN RANGE
C910/1705-60	Charcoal Vault Area AOG		<u>115.0</u> mR/Hr	10 ⁻¹ - 10 ⁴
C911/ARM-1	Cond. Pump Stairway	· 🔲 _	2.0 mR/Hr	10 ⁻¹ - 10 ³
C911/ARM-2	Feedwater Heaters		4.0 mR/Hr	10 ⁰ - 10 ⁴
C911/ARM-3	Main Control Room		0.04 mR/Hr	10 ⁻² - 10 ²
C911/ARM-4	Turbine-Front Standard		1.0 mR/Hr	10 ⁰ - 10 ⁴
C911/ARM-5	Radwaste-Corridor		<u>10.0</u> mR/Hr	10 ⁻¹ - 10 ³
C911/ARM-6	Radwaste-Sump Area		20.0 mR/Hr	10⁰ - 10 ⁴
C911/ARM-7	Chem. Waste Tank		10.0 mR/Hr	10 ⁰ - 10 ⁴
C911/ARM-8	Rx-Outside TIP Room		8.0 mR/Hr	X 10 ⁻² - 10 ²
C911/ARM-9	Radwaste Shipping Lock		3.0 mR/Hr	10 ⁻² - 10 ²
C911/ARM-10	Rx Access Area (S.E.)		40.0 mR/Hr	10 ⁻² - 10 ²
C911/ARM-11	New Fuel Racks		0.2 mR/Hr	10 ⁻¹ - 10 ³
C911/ARM-12	New Fuel Vault		0.5 mR/Hr	10⁻¹ - 10³
C911/ARM-13	Shield Plug Area		0.9 mR/Hr	10 ⁻¹ - 10 ³
C911/ARM-14	Spent Fuel Pool Area		10.0 mR/Hr	 10 ⁻¹ - 10 ³
	ARM-1} ARM-2} ARM-3} ARM-4} ARM-5}	200 mR/Hr 55 mR/Hr 600 mR/Hr 1 mR/Hr 450 mR/Hr 15 mR/Hr 6000 mR/Hr	ARM-3 ARM-10 ARM-11 ARM-12 ARM-12 ARM-13	7} 300 mR/Hr 3} 5 mR/Hr 3} 50 mR/Hr 3} 60 mR/Hr 1} 6 mR/Hr 2} 40 mR/Hr 3} 40 mR/Hr 4} 30 mR/Hr
	OOS Out of Service	OSH Off S	scale Hi DS Do	wn Scale

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	AREA RADIATION MONITORS TIME:	3:00
PANEL/ID NO.	MONITOR TREND READING ALARM IN RAN	GE
C910/1705-60	Charcoal Vault Area AOG115.0 mR/Hr10 ⁻¹	- 10 ⁴
C911/ARM-1	Cond. Pump Stairway 2.0 mR/Hr 10 ⁻¹	- 10 ³
C911/ARM-2	Feedwater Heaters 4.0 mR/Hr 10 ⁰ -	10 ⁴
C911/ARM-3	Main Control Room0.04 mR/Hr10 ⁻² ·	- 10 ²
C911/ARM-4	Turbine-Front Standard 1.0 mR/Hr 10 ⁰ -	10 ⁴
C911/ARM-5	Radwaste-Corridor10.0 mR/Hr10 ⁻¹ -	· 10 ³
C911/ARM-6	Radwaste-Sump Area 20.0 mR/Hr 10 ⁰ -	10 ⁴
C911/ARM-7	Chem. Waste Tank 10.0 mR/Hr 10 ⁰ -	10 ⁴
C911/ARM-8	Rx-Outside TIP Room 8.0 mR/Hr X 10 ⁻² -	· 10 ²
C911/ARM-9	Radwaste Shipping Lock 3.0 mR/Hr 10 ⁻² -	· 10 ²
C911/ARM-10	Rx Access Area (S.E.) 40.0 mR/Hr 10 ⁻² -	10 ²
C911/ARM-11	New Fuel Racks 0.2 mR/Hr 10 ⁻¹ -	10 ³
C911/ARM-12	New Fuel Vault 0.5 mR/Hr 10 ⁻¹ -	10 ³
C911/ARM-13	Shield Plug Area 0.9 mR/Hr 10 ⁻¹ -	10 ³
C911/ARM-14	Spent Fuel Pool Area 10.0 mR/Hr 10 ⁻¹ -	10 ³
	1705-60} 200 mR/Hr ARM-7} 300 mR/Hr ARM-1} 55 mR/Hr ARM-8} 5 mR/Hr ARM-2} 600 mR/Hr ARM-9} 50 mR/Hr ARM-3} 1 mR/Hr ARM-10} 60 mR/Hr ARM-4} 450 mR/Hr ARM-11} 6 mR/Hr ARM-5} 15 mR/Hr ARM-12} 40 mR/Hr ARM-6} 6000 mR/Hr ARM-13} 40 mR/Hr	
	OOS Out of Service OSH Off Scale Hi DS Down Scale	

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	AREA RADIATI	ON MONITORS	TIME: 3:15
PANEL/ID NO.	MONITOR	TREND READING	ALARM IN RANGE
C910/1705-60	Charcoal Vault Area AOG	115.0 mR/Hr	10 ⁻¹ - 10 ⁴
C911/ARM-1	Cond. Pump Stairway	2.0 mR/Hr	10 ⁻¹ - 10 ³
C911/ARM-2	Feedwater Heaters	4.0 mR/Hr	10 ⁰ - 10 ⁴
C911/ARM-3	Main Control Room	0.0 mR/Hr	10 ⁻² - 10 ²
C911/ARM-4	Turbine-Front Standard	<u>1.0</u> mR/Hr	10 [°] - 10 ⁴
C911/ARM-5	Radwaste-Corridor	10.0 mR/Hr	10 ⁻¹ - 10 ³
C911/ARM-6	Radwaste-Sump Area	20.0 mR/Hr	10 ⁰ - 10 ⁴
C911/ARM-7	Chem. Waste Tank	10.0 mR/Hr	10 ⁰ - 10 ⁴
C911/ARM-8	Rx-Outside TIP Room	OSH mR/Hr	X 10 ⁻² - 10 ²
C911/ARM-9	Radwaste Shipping Lock	<u>3.0</u> mR/Hr	10 ⁻² - 10 ²
 C911/ARM-10	Rx Access Area (S.E.)	OSH mR/Hr	X 10 ⁻² - 10 ²
C911/ARM-11	New Fuel Racks	0.2 mR/Hr	10 ⁻¹ - 10 ³
C911/ARM-12	New Fuel Vault	0.5 mR/Hr	10 ⁻¹ - 10 ³
C911/ARM-13	Shield Plug Area	0.9 mR/Hr	10 ⁻¹ - 10 ³
C911/ARM-14	Spent Fuel Pool Area	10.0 mR/Hr	10 ⁻¹ - 10 ³
	ARM-1} ARM-2} ARM-3} ARM-4} ARM-5}	55 mR/Hr ARM-8 600 mR/Hr ARM-8 1 mR/Hr ARM-10 450 mR/Hr ARM-11 15 mR/Hr ARM-12 6000 mR/Hr ARM-13 6000 mR/Hr ARM-13	7} 300 mR/Hr 3} 5 mR/Hr 3} 50 mR/Hr 3} 60 mR/Hr 1} 6 mR/Hr 2} 40 mR/Hr 3} 40 mR/Hr 4} 30 mR/Hr
	OOS Out of Service	OSH Off Scale Hi DS Do	wn Scale

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	AREA RADIATI	ON MONITORS	TIME: 3:30
PANEL/ID NO.	MONITOR	TREND READING	ALARM IN RANGE
C910/1705-60	Charcoal Vault Area AOG	<u>115.0</u> mR	/Hr 10 ⁻¹ - 10 ⁴
C911/ARM-1	Cond. Pump Stairway	<u>2.0</u> mR	/Hr10 ⁻¹ - 10 ³
C911/ARM-2	Feedwater Heaters	4.0 mR	/Hr 10 ⁰ - 10 ⁴
C911/ARM-3	Main Control Room	0.04 mR	/Hr 10 ⁻² - 10 ²
C911/ARM-4	Turbine-Front Standard	<u>1.0</u> mR	/Hr 10 ⁰ - 10 ⁴
C911/ARM-5	Radwaste-Corridor	10.0 mR	/Hr 10 ⁻¹ - 10 ³
C911/ARM-6	Radwaste-Sump Area	20.0 mR	/Hr 10 ^o - 10 ⁴
C911/ARM-7	Chem. Waste Tank	<u>10.0</u> mR	/Hr 10 ⁰ - 10 ⁴
C911/ARM-8	Rx-Outside TIP Room	OSH mR	/Hr X 10 ⁻² - 10 ²
C911/ARM-9	Radwaste Shipping Lock	<u>3.0</u> mR	/Hr 10 ⁻² - 10 ²
C911/ARM-10	Rx Access Area (S.E.)	OSH mR	/Hr X 10 ⁻² - 10 ²
C911/ARM-11	New Fuel Racks	0.2 mR	/Hr 10 ⁻¹ - 10 ³
C911/ARM-12	New Fuel Vault	0.5 mR	/Hr 10 ⁻¹ - 10 ³
C911/ARM-13	Shield Plug Area	0.9 mR	/Hr 10 ⁻¹ - 10 ³
C911/ARM-14	Spent Fuel Pool Area	10.0 mR	/Hr 10 ⁻¹ - 10 ³
	ARM-1} ARM-2} ARM-3} ARM-4} ARM-5}	55 mR/Hr A 600 mR/Hr A 1 mR/Hr A 450 mR/Hr A 15 mR/Hr A 6000 mR/Hr A 6000 mR/Hr A	NRM-7} 300 mR/Hr NRM-8} 5 mR/Hr NRM-9} 50 mR/Hr RM-10} 60 mR/Hr RM-11} 6 mR/Hr RM-12} 40 mR/Hr RM-13} 40 mR/Hr RM-13} 30 mR/Hr
	OOS Out of Service	OSH Off Scale Hi DS	Down Scale

	AREA RADIATI	ON MO	ONITORS	TIME:	3:45
PANEL/ID NO.	MONITOR	TREND	READING	ALARM IN	RANGE
C910/1705-60	Charcoal Vault Area AOG		<u>115.0</u> mR/Hr		10 ⁻¹ - 10 ⁴
C911/ARM-1	Cond. Pump Stairway		2.0 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-2	Feedwater Heaters		<u>4.0</u> mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-3	Main Control Room		0.04 mR/Hr		10 ⁻² - 10 ²
C911/ARM-4	Turbine-Front Standard		<u>1.0</u> mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-5	Radwaste-Corridor		<u>10.0</u> mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-6	Radwaste-Sump Area		20.0 mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-7	Chem. Waste र अध		<u>10.0</u> mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-8	Rx-Outside TIP Room		OSH mR/Hr	X	10 ⁻² - 10 ²
C911/ARM-9	Radwaste Shipping Lock		3.0 mR/Hr		10 ⁻² - 10 ²
C911/ARM-10	Rx Access Area (S.E.)		OSH mR/Hr	X	10 ⁻² - 10 ²
C911/ARM-11	New Fuel Racks		0.2 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-12	New Fuel Vault		0.5 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-13	Shield Plug Area		0.9 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-14	Spent Fuel Pool Area		10.0 mR/Hr		10 ⁻¹ - 10 ³
	ARM-1} ARM-2} ARM-3} ARM-4} ARM-5}	200 mR/Hr 55 mR/Hr 600 mR/Hr 1 mR/Hr 450 mR/Hr 15 mR/Hr 6000 mR/H	ARM-6 ARM-10 ARM-11 ARM-12 ARM-12 Ir ARM-13	7} 300 mR/Hr 8} 5 mR/Hr 9} 50 mR/Hr 0} 60 mR/Hr 1} 6 mR/Hr 2} 40 mR/Hr 3} 40 mR/Hr 4} 30 mR/Hr	
	OOS Out of Service	OSH Off	Scale Hi DS Do	wn Scale	

	AREA RADIATI	ON MC	NITORS	TIME:	4:00
PANEL/ID NO.	MONITOR	TREND	READING		IGE
C910/1705-60	Charcoal Vault Area AOG		115.0 mR/Hr	10 ⁻¹	- 10 ⁴
C911/ARM-1	Cond. Pump Stairway		2.0 mR/Hr	10 ⁻¹	- 10 ³
C911/ARM-2	Feedwater Heaters		4.0 mR/Hr	10 ⁰ -	· 10 ⁴
C911/ARM-3	Main Control Room	<u> </u>	0.04 mR/Hr	10 ⁻²	- 10 ²
C911/ARM-4	Turbine-Front Standard		1.0 mR/Hr	10 ^o -	· 10 ⁴
C911/ARM-5	Radwaste-Corridor		10.0 mR/Hr	10 ⁻¹	- 10 ³
C911/ARM-6	Radwaste-Sump Area		20.0 mR/Hr	10º -	10 ⁴
C911/ARM-7	Chem. Waste Tank		10.0 mR/Hr	10 ^º -	10 ⁴
C911/ARM-8	Rx-Outside TIP Room		OSH mR/Hr	X 10 ⁻²	- 10 ²
C911/ARM-9	Radwaste Shipping Lock		3.0 mR/Hr	10 ⁻²	· 10 ²
C911/ARM-10	Rx Access Area (S.E.)		OSH mR/Hr	X 10 ⁻² -	· 10 ²
C911/ARM-11	New Fuel Racks		0.2 mR/Hr	10 ⁻¹	· 10 ³
C911/ARM-12	New Fuel Vault		0.5 mR/Hr	10 ⁻¹ -	· 10 ³
C911/ARM-13	Shield Plug Area		0.9 mR/Hr	10 ⁻¹ -	· 10 ³
C911/ARM-14	Spent Fuel Pool Area		10.0 mR/Hr	10 ⁻¹	· 10 ³
	ARM-1} ARM-2} ARM-3} ARM-4} ARM-5}	200 mR/Hr 55 mR/Hr 600 mR/Hr 1 mR/Hr 450 mR/Hr 15 mR/Hr 6000 mR/Hr	ARM-8 ARM-9 ARM-10 ARM-11 ARM-12 ARM-12	/} 300 mR/Hr } 5 mR/Hr } 50 mR/Hr } 60 mR/Hr } 6 mR/Hr } 40 mR/Hr } 40 mR/Hr } 30 mR/Hr	
	OOS Out of Service	OSH Off s	Scale Hi DS Do	wn Scale	

	AREA RADIATIO	N MO	NITORS	TIME:	4:15
PANEL/ID NO.	MONITOR	REND	READING	ALARM IN	RANGE
C910/1705-60	Charcoal Vault Area AOG		<u>115.0</u> mR/Hr		10 ⁻¹ - 10 ⁴
C911/ARM-1	Cond. Pump Stairway	<u> </u>	2.0 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-2	Feedwater Heaters		4.0 mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-3	Main Control Room		0.04 mR/Hr		10 ⁻² - 10 ²
C911/ARM-4	Turbine-Front Standard		1.0 mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-5	Radwaste-Corridor		10.0 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-6	Radwaste-Sump Area		20.0 mR/Hr		10 ⁰ - 10⁴
C911/ARM-7	Chem. Waste Tank		<u>10.0</u> mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-8	Rx-Outside TIP Room		OSH mR/Hr	X	10 ⁻² - 10 ²
C911/ARM-9	Radwaste Shipping Lock		3.0 mR/Hr		10 ⁻² - 10 ²
C911/ARM-10	Rx Access Area (S.E.)	<u> </u>	OSH mR/Hr	X	10 ⁻² - 10 ²
C911/ARM-11	New Fuel Racks		0.2 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-12	New Fuel Vault		0.5 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-13	Shield Plug Area		0.9 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-14	Spent Fuel Pool Area		<u>10.0</u> mR/Hr		10 ⁻¹ - 10 ³
	1705-60} 200 ARM-1} 55 ARM-2} 600 ARM-3} 1 m ARM-4} 450 ARM-5} 15 ARM-6} 600	mR/Hr) mR/Hr 1R/Hr) mR/Hr mR/Hr	ARM-8 ARM-9 ARM-10 ARM-11 ARM-12 ARM-13	 300 mR/Hr 5 mR/Hr 50 mR/Hr 60 mR/Hr 6 mR/Hr 40 mR/Hr 40 mR/Hr 30 mR/Hr 	
	OOS Out of Service OS	H Off S	cale Hi DS Dov	wn Scale	

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	AREA RADIATI	ON MO	ONITORS	TIME: 4:30
PANEL/ID NO.	MONITOR	TREND	READING	ALARM IN RANGE
C910/1705-60	Charcoal Vault Area AOG		<u>115.0</u> mR/Hr	10 ⁻¹ - 10 ⁴
C911/ARM-1	Cond. Pump Stairway		2.0 mR/Hr	10 ⁻¹ - 10 ³
C911/ARM-2	Feedwater Heaters		4.0 mR/Hr	10 ⁰ - 10 ⁴
C911/ARM-3	Main Control Room		0.04 mR/Hr	10 ⁻² - 10 ²
C911/ARM-4	Turbine-Front Standard		1.0 mR/Hr	10 ⁰ - 10 ⁴
C911/ARM-5	Radwaste-Corridor		10.0 mR/Hr	10 ⁻¹ - 10 ³
C911/ARM-6	Radwaste-Sump Area		20.0 mR/Hr	10 ⁰ - 10 ⁴
C911/ARM-7	Chem. Waste Tank		10.0 mR/Hr	10 ⁰ - 10 ⁴
C911/ARM-8	Rx-Outside TIP Room		OSH mR/Hr	X 10 ⁻² - 10 ²
C911/ARM-9	Radwaste Shipping Lock		3.0 mR/Hr	10 ⁻² - 10 ²
C911/ARM-10	Rx Access Area (S.E.)		OSH mR/Hr	X 10 ⁻² - 10 ²
C911/ARM-11	New Fuel Racks		0.2 mR/Hr	10 ⁻¹ - 10 ³
C911/ARM-12	New Fuel Vault		0.5 mR/Hr	10 ⁻¹ - 10 ³
C911/ARM-13	Shield Plug Area		0.9 mR/Hr	10 ⁻¹ - 10 ³
C911/ARM-14	Spent Fuel Pool Area		10.0 mR/Hr	10 ⁻¹ - 10 ³
	ARM-1} ARM-2} ARM-3} ARM-4} ARM-5}	200 mR/Hr 55 mR/Hr 600 mR/Hr 1 mR/Hr 450 mR/Hr 15 mR/Hr 6000 mR/H	ARM-3 ARM-10 ARM-17 ARM-12 ARM-12 r ARM-13	7} 300 mR/Hr 8} 5 mR/Hr 9} 50 mR/Hr 0} 60 mR/Hr 1} 6 mR/Hr 2} 40 mR/Hr 3} 40 mR/Hr 4} 30 mR/Hr
	OOS Out of Service	OSH Off	Scale Hi DS Do	wn Scale

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	AREA RADIATI	ON M	ONITORS	TIME:	4:4
PANEL/ID NO.	MONITOR	TREND	READING	ALARM IN	RANGE
C910/1705-60	Charcoal Vault Area AOG		115.0 mR/Hr]10 ⁻¹ - 10 ⁴
C911/ARM-1	Cond. Pump Stairway	, 🗖 .	2.0 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-2	Feedwater Heaters		4.0 mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-3	Main Control Room		0.04 mR/Hr		10 ⁻² - 10 ²
C911/ARM-4	Turbine-Front Standard		<u>1.0</u> mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-5	Radwaste-Corridor		10.0 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-6	Radwaste-Sump Area		20.0 mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-7	Chem. Waste Tank		<u>10.0</u> mR/Hr		10 ⁰ - 10 ⁴
C911/ARM-8	Rx-Outside TIP Room		OSH mR/Hr	x	10 ⁻² - 10 ²
C911/ARM-9	Radwaste Shipping Lock		3.0_mR/Hr		10 ⁻² - 10 ²
C911/ARM-10	Rx Access Area (S.E.)		OSH mR/Hr	X	10 ⁻² - 10 ²
C911/ARM-11	New Fuel Racks		0.2 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-12	New Fuel Vault		0.5 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-13	Shield Plug Area		0.9 mR/Hr		10 ⁻¹ - 10 ³
C911/ARM-14	Spent Fuel Pool Area		10.0 mR/Hr		10 ⁻¹ - 10 ³
	ARM-1} ARM-2} ARM-3} ARM-4} ARM-5}	200 mR/Hr 55 mR/Hr 600 mR/Hr 1 mR/Hr 450 mR/Hr 15 mR/Hr 6000 mR/H	ARM ARM-1 ARM-1 ARM-1 ARM-1 ARM-1	-7} 300 mR/H -8} 5 mR/Hr -9} 50 mR/Hr 10} 60 mR/Hr 11} 6 mR/Hr 12} 40 mR/Hr 13} 40 mR/Hr 14} 30 mR/Hr	r
	OOS Out of Service	OSH Off	Scale Hi DS D	own Scale	

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NONTOR	AREA RADIATION MONITORS					
MONITOR	TREND	READING	ALARM IN RANGE			
Charcoal Vault Area AOG		<u>115.0</u> mR/Hr	10 ⁻¹ · 10 ⁴			
Cond. Pump Stairway		2.0 mR/Hr	10 ⁻⁴ - 10 ³			
Feedwater Heaters		4.0 mR/Hr	10 ⁰ - 10 ⁴			
Main Control Room		0.04 mR/Hr	10 ⁻² - 10 ²			
Turbine-Front Standard		<u>1.0</u> mR/Hr	10⁰ - 10⁴			
Radwaste-Corridor		10.0 mR/Hr	10 ⁻¹ - 10 ³			
Radwaste-Sump Area		20.0 mR/Hr	10 ⁰ - 10 ⁴			
Chem. Waste Tank		<u>10.0</u> mR/Hr	10⁰ - 10 ⁴			
Rx-Outside TIP Room		OSH mR/Hr	X 10 ⁻² - 10 ²			
Radwaste Shipping Lock		3.0 mR/Hr	10⁻² - 10²			
Rx Access Area (S.E.)		OSH mR/Hr	X 10 ⁻² - 10 ²			
New Fuel Racks		0.2 mR/Hr	10 ⁻¹ - 10 ³			
New Fuel Vault		0.5 mR/Hr	10 ⁻¹ - 10 ³			
Shield Plug Area		0.9 mR/Hr	10⁻¹ - 10³			
Spent Fuel Pool Area		10.0 mR/Hr	10 ⁻¹ - 10 ³			
1705-60}	200 mR/Hr	ARM-	7} 300 mR/Hr			
-		ARM-	8} 5 mR/Hr			
•			9} 50 mR/Hr			
-			0} 60 mR/Hr			
			1} 6 mR/Hr			
•			2} 40 mR/Hr			
ALM-0}	oooo iiik/H		3} 40 mR/Hr 4} 30 mR/Hr			
	Feedwater Heaters Main Control Room Turbine-Front Standard Radwaste-Corridor Radwaste-Sump Area Chem. Waste Tank Rx-Outside TIP Room Radwaste Shipping Lock Rx Access Area (S.E.) New Fuel Racks New Fuel Racks New Fuel Vault Shield Plug Area Spent Fuel Pool Area 1705-60} ARM-13 ARM-23 ARM-33 ARM-43 ARM-65 ARM-6	Feedwater Heaters	Feedwater Heaters 4.0 mR/Hr Main Control Room 0.04 mR/Hr Turbine-Front Standard 1.0 mR/Hr Radwaste-Corridor 10.0 mR/Hr Radwaste-Sump Area 20.0 mR/Hr Chem. Waste Tank 10.0 mR/Hr Rx-Outside TIP Room OSH mR/Hr Radwaste Shipping Lock 3.0 mR/Hr Rx Access Area (S.E.) OSH mR/Hr New Fuel Racks 0.2 mR/Hr New Fuel Racks 0.2 mR/Hr Shield Plug Area 0.9 mR/Hr Spent Fuel Pool Area 10.0 mR/Hr ARM-13 55 mR/Hr ARM-1 ARM-23 600 mR/Hr ARM-1 ARM-31 1 mR/Hr ARM-1 ARM-3 51 5 mR/Hr ARM-1 ARM-63 6000 mR/Hr ARM-1 ARM-63 6000 mR/Hr ARM-1			

AREA RADIATIO	ON MO	ONITORS	TIME:	5:15
MONITOR	TREND	READING	ALARM IN	RANGE
Charcoal Vault Area AOG		<u>115.0</u> mR/l	Hr	10 ⁻¹ - 10 ⁴
Cond. Pump Stairway		2.0 mR/l	lr	10 ⁻¹ - 10 ³
Feedwater Heaters		4.0 mR/I	Hr	10 ⁰ - 10 ⁴
Main Control Room		0.04 mR/i	-ir	10 ⁻² - 10 ²
Turbine-Front Standard		<u> </u>	lr	10 ⁰ - 10 ⁴
Radwaste-Corridor		10.0_mR/i	ir	10 ⁻¹ - 10 ³
Radwaste-Sump Area		20.0 mR/H	lr	10 ⁰ - 10 ⁴
Chem. Waste Tank		10.0 mR/l	lr	10 ⁰ - 10 ⁴
Rx-Outside TIP Room		OSH mR/ł	łr X	10 ⁻² - 10 ²
Radwaste Shipping Lock		<u>3.0</u> mR/H	łr	10 ⁻² - 10 ²
Rx Access Area (S.E.)		OSH mR/ł	lr X	10 ⁻² - 10 ²
New Fuel Racks		0.2 mR/ł	łr	10 ⁻¹ - 10 ³
New Fuel Vault		0.5 mR/H	łr	10 ⁻¹ - 10 ³
Shield Plug Area		0.9 mR/H	łr	10 ⁻¹ - 10 ³
Spent Fuel Pool Area		10.0 mR/H	łr	10 ⁻¹ - 10 ³
1705-60}	200 mR/Hi	r AF	RM-73 300 mR/Hr	,
ARM-1	55 mR/Hr	AF	•	
		r A F	RM-9} 50 mR/Hr	
-			•	
-			-	
-			•	
АКМ-6}	6000 MR/F		-	
	MONITOR Charcoal Vault Area AOG Cond. Pump Stairway Feedwater Heaters Main Control Room Turbine-Front Standard Radwaste-Corridor Radwaste-Sump Area Chem. Waste Tank Rx-Outside TIP Room Radwaste Shipping Lock Rx Access Area (S.E.) New Fuel Racks New Fuel Racks New Fuel Vault Shield Plug Area Spent Fuel Pool Area	MONITOR TREND Charcoal Vault Area AOG	Charcoal Vault Area AOG 115.0 mR/l Cond. Pump Stairway 2.0 mR/l Feedwater Heaters 4.0 mR/l Main Control Room 0.04 mR/l Main Control Room 0.04 mR/l Turbine-Front Standard 1.0 mR/l Radwaste-Corridor 10.0 mR/l Radwaste-Sump Area 20.0 mR/l Chem. Waste Tank 10.0 mR/l Rx-Outside TIP Room OSH mR/l Radwaste Shipping Lock 3.0 mR/l Rx Access Area (S.E.) OSH mR/l New Fuel Racks 0.2 mR/l New Fuel Racks 0.2 mR/l Spent Fuel Pool Area 0.9 mR/l 1705-60 200 mR/lr AF ARM-1 55 mR/lr AF ARM-1 55 mR/lr AF ARM-3 1 mR/lr AF ARM-3 1 mR/lr AF ARM-3 1 mR/lr AF ARM-1 55 mR/lr AF ARM-3 1 mR/lr AF ARM-4 450 mR/lr AF ARM-5 15 mR/Hr AF ARM-5 1500 m	MONITOR TREND READING ALARM IN Charcoal Vault Area AOG 115.0 mR/Hr Import Cond. Pump Stairway 2.0 mR/Hr Import Feedwater Heaters 4.0 mR/Hr Import Main Control Room 0.04 mR/Hr Import Main Control Room 0.04 mR/Hr Import Turbine-Front Standard 1.0 mR/Hr Import Radwaste-Corridor 10.0 mR/Hr Import Radwaste-Sump Area 20.0 mR/Hr Import Chem. Waste Tank 10.0 mR/Hr X Radwaste Shipping Lock 3.0 mR/Hr X Radwaste Shipping Lock 0.2 mR/Hr X New Fuel Racks 0.2 mR/Hr X New Fuel Racks 0.2 mR/Hr Import Shield Plug Area 0.9 mR/Hr MRM-10 1705-60) 200 mR/Hr ARM-7) 300 mR/Hr ARM-3) 5 mR/Hr ARM-1) 55 mR/Hr ARM-3) 5 mR/Hr ARM-3) 50 mR/Hr ARM-3) 1 mR/Hr ARM-3) 50 mR/Hr ARM-3) 100 mR/Hr ARM-3) 1 mR/Hr ARM-10) 60 mR/Hr ARM-2) 600 mR/Hr ARM-3) 15 mR/Hr ARM-10) 60 mR/Hr AR

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	AREA RADIATION	N MONITORS TIME: 5:30
PANEL/ID NO.	MONITOR TRE	TREND READING ALARM IN RANGE
C910/1705-60	Charcoal Vault Area AOG	<u> </u>
C911/ARM-1	Cond. Pump Stairway	2.0 mR/Hr 10 ⁻¹ - 10 ³
C911/ARM-2	Feedwater Heaters	4.0 mR/Hr 10 ⁰ - 10 ⁴
C911/ARM-3	Main Control Room	0.04 mR/Hr 10 ⁻² - 10 ²
C911/ARM-4	Turbine-Front Standard	<u> </u>
C911/ARM-5	Radwaste-Corridor	<u> </u>
C911/ARM-6	Radwaste-Sump Area	20.0 mR/Hr 10 ⁰ - 10 ⁴
C911/ARM-7	Chem. Waste Tank	10.0 mR/Hr10 ⁰ - 10 ⁴
C911/ARM-8	Rx-Outside TIP Room	OSH mR/Hr X 10 ⁻² - 10 ²
C911/ARM-9	Radwaste Shipping Lock	<u>3.0</u> mR/Hr 10 ⁻² - 10 ²
C911/ARM-10	Rx Access Area (S.E.)	OSH mR/Hr X 10 ⁻² - 10 ²
C911/ARM-11	New Fuel Racks	0.2 mR/Hr 10 ⁻¹ - 10 ³
C911/ARM-12	New Fuel Vault	0.5 mR/Hr 10 ⁻¹ - 10 ³
C911/ARM-13	Shield Plug Area	0.9 mR/Hr 10 ⁻¹ - 10 ³
C911/ARM-14	Spent Fuel Pool Area	<u> </u>
	1705-60} 200 m ARM-1} 55 mF ARM-2} 600 m ARM-3} 1 mR/ ARM-4} 450 m ARM-5} 15 mF ARM-6} 6000 m	mR/HrARM-8} 5 mR/Hr0 mR/HrARM-9} 50 mR/HrnR/HrARM-10} 60 mR/Hr0 mR/HrARM-11} 6 mR/HrmR/HrARM-12} 40 mR/Hr
	OOS Out of Service OSH -	SH Off Scale Hi DS Down Scale

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PROCES	S RADIATION	MO	NITOR	S		TIME:	0:00
PANEL/ID NO.	MONITOR	TREND	READING		ALARM IN	RANGE	-
C910/1705-18	Main Stack Lo		15.0	CPS		10 ⁻¹ - 10'	6
C910/1001-608	Main Stack Hi			R/Hr		10 ⁻¹ - 10	
C910/1705-32	Rx Bldg Vent Lo		20.0			10 ⁻¹ - 10 ⁰	
C910/1001-609	Rx Bldg Vent Hi		DS	R/Hr		10 ⁻¹ - 10 ⁴	
C910/1001-610	Turbine Bldg Vent Hi		DS	R/Hr		10 ⁻¹ - 10'	
C910/1705-2	Main Steam Line A		2645	mR/Hr		10 ⁰ - 10 ⁰	6
	Main Steam Line B		3400	mR/Hr		10 ⁰ - 10 ⁰	6
	Main Steam Line C		3050	mR/Hr		10 ⁰ - 10 ⁰	6
	Main Steam Line D		2550	mR/Hr		10 ⁰ - 10 ⁰	6
C910/1705-3	Air Ejector Off Gas		<u> </u>	mR/Hr		10 ⁰ - 10 ⁶	6
C910/1705-4	A Loop RBCCW		250	CPS		10 ⁻¹ - 10 ⁶	5
	B Loop RBCCW		150	CPS		10 ⁻¹ - 10 ⁶	3
C910/1705-8	Refuel Floor Vent		<u> </u>	mR/Hr		10 ⁻¹ - 10 ³	3
C910/1705-9	SBGT Exhaust		3.0 i	mR/Hr		10 ⁰ - 10 ⁴	l I
C910/1705-16	Control Rm Air Intake		<u> </u>	mR/Hr		10 ⁻² - 10 ²	2
C910/1705-30	R/W Discharge		100.0	CPS		10 ⁻¹ - 10 ⁶	6
C910/1705-5	Off Gas Post Treatment		200	CPS		10 ⁻¹ - 10 ⁶	6
C170/1001-606	Drywell CHRMS A		2.5	R/Hr		10 ⁻¹ - 10 ⁷	7
	Drywell CHRMS B		2.8	R/Hr		10 ⁻¹ - 10 ⁷	7
C170/1001-607	Torus CHRMS A		DS I	R/Hr		10 ⁻¹ - 10 ⁷	7
	Torus CHRMS B		DS I	R/Hr		10 ⁻¹ - 10 ⁷	7
FLOW RATES SBGT (CFM) Rx Bldg (CFM)	Panel C7 ISOLATED 105000				Main Stack TB Vent		_CFM* _CFM*
MET DATA Delta Temp (°F) Outside Temp (°F) Stability Class Precip	Panel MT1 <u>-1.00</u> <u>40.0</u> *		Dir (from) Speed	<u>220'</u> <u>118</u> <u>10.0</u>	* <u>160'</u> 	<u>33'</u> 120 8.7	Deg. MPH
*Not Available In C	ontrol Poom	008 0	It of Service	001			0

*Not Available In Control Room

OOS-Out of Service OSH-Off Scale Hi DS-Down Scale

99-06	
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PROCES	S RADIATION	MO	NITOR	S		TIME:	00:10
PANEL/ID NO.	MONITOR	TREND	READING		ALARM IN	RANGE	
C910/1705-18	Main Stack Lo		30.0	CPS [10 ⁻¹ - 10 ⁶	
C910/1001-608	Main Stack Hi		DS F	R/Hr		10 ⁻¹ - 10 ⁴	
C910/1705-32	Rx Bldg Vent Lo		40.0	CPS [10 ⁻¹ - 10 ⁶	
C910/1001-609	Rx Bldg Vent Hi		DS F	R/Hr		10 ⁻¹ - 10 ⁴	
C910/1001-610	Turbine Bldg Vent Hi		DS F	R/Hr		10 ⁻¹ - 10 ⁴	
C910/1705-2	Main Steam Line A		<u> </u>	nR/Hr	Hi Hi	10 ⁰ - 10 ⁶	
	Main Steam Line B		<u>42000</u> r	nR/Hr	Hi Hi	10 ⁰ - 10 ⁶	
	Main Steam Line C		<u>42000</u> r	nR/Hr	Hi Hi	10 ⁰ - 10 ⁶	
	Main Steam Line D		<u>33000</u> n	nR/Hr	Hi Hi	10 ⁰ - 10 ⁶	
C910/1705-3	Air Ejector Off Gas		<u>30000.0</u> n	nR/Hr	Hi Hi	10 ⁰ - 10 ⁶	
C910/1705-4	A Loop RBCCW		15000.0	CPS [10 ⁻¹ - 10 ⁶	
	B Loop RBCCW		18000.0	CPS [10 ⁻¹ - 10 ⁶	
C910/1705-8	Refuel Floor Vent		<u> </u>	nR/Hr		10 ⁻¹ - 10 ³	
C910/1705-9	SBGT Exhaust		<u> </u>	nR/Hr		10 ⁰ - 10 ⁴	
C910/1705-16	Control Rm Air Intake		<u> </u>	nR/Hr		10 ⁻² - 10 ²	
C910/1705-30	R/W Discharge		100.0	PS [10 ⁻¹ - 10 ⁶	
C910/1705-5	Off Gas Post Treatment		45000 0	PS [Hi	10 ⁻¹ - 10 ⁶	
C170/1001-606	Drywell CHRMS A		1 F	۲/Hr		10 ⁻¹ - 10 ⁷	
	Drywell CHRMS B		1 F	₹/Hr		10 ⁻¹ - 10 ⁷	
C170/1001-607	Torus CHRMS A		1 F	R/Hr		10 ⁻¹ - 10 ⁷	
	Torus CHRMS B		1 F	R/Hr		10 ⁻¹ - 10 ⁷	
FLOW RATES	Panel C7						
SBGT (CFM) Rx Bldg (CFM)	4000 ISOLATED			1	Main Stack TB Vent		CFM* CFM*
MET DATA	Panel MT1			<u>220'</u>	* <u>160'</u>	<u>33'</u>	
Delta Temp (°F) Outside Temp (°F)	<u>-1.00</u> <u>40.0</u>		Dir (from) Speed	<u>118</u>		<u>120</u>	Deg.
Stability Class Precip	<u>,</u> * *		opeeu	<u>10.0</u>		<u>8.7</u>	MPH
Not Available In Co	ontrol Room	005.00	t of Service		ff Oaala Lii	DS-Dowr	0

FRUCES	S RADIATION			(5		TIME:	0:18
PANEL/ID NO.	MONITOR	TREND	READING		ALARM IN	RANG	
C910/1705-18	Main Stack Lo		4500.0	CPS	Hi	10 ⁻¹ - 10	6
C910/1001-608	Main Stack Hi		DS	R/Hr		10 ⁻¹ - 10	4
C910/1705-32	Rx Bldg Vent Lo		30.0	CPS		10 ⁻¹ - 10	6
C910/1001-609	Rx Bldg Vent Hi		DS	R/Hr		10 ⁻¹ - 10	4
C910/1001-610	Turbine Bldg Vent Hi		DS	R/Hr		10 ⁻¹ - 10	4
C910/1705-2	Main Steam Line A		28000	mR/Hr	Hi Hi	10 ⁰ - 10	6
	Main Steam Line B		40000	mR/Hr	Hi Hi	10 ⁰ - 10	6
	Main Steam Line C		40000	mR/Hr	Hi Hi	10 ⁰ - 10	6
	Main Steam Line D		28000	mR/Hr	Hi Hi	10 ⁰ - 10 ⁰	6
C910/1705-3	Air Ejector Off Gas		24000.0	mR/Hr	Hi Hi	10 ⁰ - 10 ⁰	6
C910/1705-4	A Loop RBCCW		12000.0	CPS		10 ⁻¹ - 10 ⁴	6
	B Loop RBCCW		16000.0	CPS		10 ⁻¹ - 10 ⁰	6
C910/1705-8	Refuel Floor Vent		5.0	mR/Hr		10 ⁻¹ - 10 ³	3
C910/1705-9	SBGT Exhaust		8.0	mR/Hr		10 ⁰ - 10'	4
C910/1705-16	Control Rm Air Intake		0.05	mR/Hr		10 ⁻² - 10 ²	2
C910/1705-30	R/W Discharge		100.0	CPS		10 ⁻¹ - 10 ⁶	6
C910/1705-5	Off Gas Post Treatment		130000	CPS		10 ⁻¹ - 10 ⁶	5
C170/1001-606	Drywell CHRMS A		1	R/Hr		10 ⁻¹ - 10 ⁷	7
	Drywell CHRMS B		5	R/Hr		10 ⁻¹ - 10 ⁷	7
C170/1001-607	Torus CHRMS A		1	R/Hr		10 ⁻¹ - 10 ⁷	7
	Torus CHRMS B		2	R/Hr		10 ⁻¹ - 10 ³	7
FLOW RATES SBGT (CFM) Rx Bldg (CFM)	Panel C7 <u>4000</u> ISOLATED				Main Stack TB Vent	·····	_CFM* _CFM*
MET DATA Delta Temp (°F) Outside Temp (°F) Stability Class Precip	Panel MT1 -1.00 40.0 *		Dir (from) Speed	<u>220'</u> <u>119</u> <u>10.0</u>	* <u>160'</u> 	<u>33'</u> <u>121</u> <u>8.7</u>	– Deg. MPH

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PROCES	S RADIATION	I MO	NITOF	RS		TIME:	0:30
PANEL/ID NO.	MONITOR	TREND	READING		ALARM IN	RANG	
C910/1705-18	Main Stack Lo		1200.0	CPS	Hi	10 ⁻¹ - 10	6
C910/1001-608	Main Stack Hi		DS	R/Hr		10 ⁻¹ - 10	⁴
C910/1705-32	Rx Bldg Vent Lo		25.0	CPS		10 ⁻¹ - 10	6
C910/1001-609	Rx Bldg Vent Hi		DS	R/Hr		10 ⁻¹ - 10	4
C910/1001-610	Turbine Bldg Vent Hi		DS	R/Hr		10 ⁻¹ - 10	14
C910/1705-2	Main Steam Line A		12700	mR/Hr	Hi Hi	10 ⁰ - 10	e
	Main Steam Line B		16200	mR/Hr	Hi Hi	10 ⁰ - 10	6
	Main Steam Line C		16500	mR/Hr	Hi Hi	10 ⁰ - 10	6
	Main Steam Line D		12700	mR/Hr	Hi Hi	10 ⁰ - 10	6
C910/1705-3	Air Ejector Off Gas		12000.0	mR/Hr	Hi Hi	10 ⁰ - 10	6
C910/1705-4	A Loop RBCCW		11000.0	CPS		10 ⁻¹ - 10	6
	B Loop RBCCW		15000.0	CPS		10 ⁻¹ - 10	6
C910/1705-8	Refuel Floor Vent		5.0	mR/Hr		10 ⁻¹ - 10	3
C910/1705-9	SBGT Exhaust		3.0	mR/Hr		10 ⁰ - 10	4
C910/1705-16	Control Rm Air Intake		0.05	mR/Hr		10 ⁻² - 10	2
C910/1705-30	R/W Discharge		100.0	CPS		10 ⁻¹ - 10	6
C910/1705-5	Off Gas Post Treatment		68500	CPS		10 ⁻¹ - 10	6
C170/1001-606	Drywell CHRMS A		1	R/Hr		10 ⁻¹ - 10	7
	Drywell CHRMS B		10	R/Hr		10 ⁻¹ - 10	7
C170/1001-607	Torus CHRMS A		1	R/Hr		10 ⁻¹ - 10	7
	Torus CHRMS B		4	R/Hr		10 ⁻¹ - 10	7
FLOW RATES SBGT (CFM) Rx Bldg (CFM)	Panel C7 <u>4000</u> ISOLATED				Main Stack TB Vent		_CFM* _CFM*
MET DATA Delta Temp (°F) Outside Temp (°F) Stability Class Precip	Panel MT1 -1.20 42.0 *		Dir (from) Speed	<u>220'</u> <u>118</u> <u>8.0</u>	* <u>160'</u> 	<u>33'</u> 120 6.7	– Deg. MPH
*Not Available In C	ontrol Room	00S-01	It of Service	OSH-	Off Scale Hi	DS-Dow	vn Scale

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PROCES	S RADIATION	I MO	NITOR	S		TIME:	0:45
PANEL/ID NO.	MONITOR	TREND	READING		ALARM IN	RANG	Ε
C910/1705-18	Main Stack Lo		20.0	CPS		10 ⁻¹ - 10	6
C910/1001-608	Main Stack Hi		DS	R/Hr		10 ⁻¹ - 10	4
C910/1705-32	Rx Bldg Vent Lo		20.0	CPS		10 ⁻¹ - 10	6
C910/1001-609	Rx Bldg Vent Hi		DS I	R/Hr		10 ⁻¹ - 10	4
C910/1001-610	Turbine Bldg Vent Hi		DS	R/Hr		10 ⁻¹ - 10	4
C910/1705-2	Main Steam Line A		<u> </u>	mR/Hr		10 ⁰ - 10	6
	Main Steam Line B		<u>125</u> r	mR/Hr		10 ⁰ - 10	6
	Main Steam Line C		<u> </u>	nR/Hr		10 ⁰ - 10	6
	Main Steam Line D		<u>95</u> r	nR/Hr		10 ⁰ - 10	6
C910/1705-3	Air Ejector Off Gas		<u> </u>	nR/Hr		10 ⁰ - 10	6
C910/1705-4	A Loop RBCCW		10000.0	CPS		10 ⁻¹ - 10	6
	B Loop RBCCW		14700.0	CPS		10 ⁻¹ - 10	6
C910/1705-8	Refuel Floor Vent		<u> </u>	nR/Hr		10 ⁻¹ - 10 ³	3
C910/1705-9	SBGT Exhaust		<u> </u>	nR/Hr		10 ⁰ - 10	4
C910/1705-16	Control Rm Air Intake		<u> </u>	nR/Hr		10 ⁻² - 10 ²	2
C910/1705-30	R/W Discharge		100.0	CPS		10 ⁻¹ - 10 ⁶	6
C910/1705-5	Off Gas Post Treatment		400 0	CPS		10 ⁻¹ - 10 ⁶	6
C170/1001-606	Drywell CHRMS A		1 F	R/Hr		10 ⁻¹ - 10	7
	Drywell CHRMS B		<u> </u>	R/Hr		10 ⁻¹ - 10	7
C170/1001-607	Torus CHRMS A		1 F	R/Hr		10 ⁻¹ - 10	7
	Torus CHRMS B		<u> </u>	R/Hr		10 ⁻¹ - 10	7
FLOW RATES	Panel C7						
SBGT (CFM) Rx Bldg (CFM)	4000 ISOLATED				Main Stack TB Vent		_CFM* _CFM*
MET DATA Delta Temp (°F) Outside Temp (°F) Stability Class Precip	Panel MT1 <u>-1.20</u> <u>42.0</u> *		Dir (from) Speed	<u>220'</u> <u>119</u> 9.0	* <u>160'</u> 	<u>33'</u> 121 7.7	Deg. MPH
*Not Available In C	ontrol Room	OOS-Ou	It of Service	OSH-	Off Scale Hi	DS-Dow	n Scale

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PROCES	S RADIATION	MO	NITOR	S	TIME:	1:00
PANEL/ID NO.	MONITOR	TREND	READING	ALARM	IN RANGE	
C910/1705-18	Main Stack Lo		<u> </u>	PS	10 ⁻¹ - 10 ⁶	
C910/1001-608	Main Stack Hi		DS R	/Hr	10 ⁻¹ - 10 ⁴	
C910/1705-32	Rx Bldg Vent Lo		20.0 C	PS	10 ⁻¹ - 10 ⁶	
C910/1001-609	Rx Bldg Vent Hi		DS R	/Hr	10 ⁻¹ - 10 ⁴	
C910/1001-610	Turbine Bldg Vent Hi		DS R/	/Hr	10 ⁻¹ - 10 ⁴	
C910/1705-2	Main Steam Line A		<u>15</u> m	ıR/Hr	10 ⁰ - 10 ⁶	
	Main Steam Line B		<u> </u>	R/Hr	10 ⁰ - 10 ⁶	
	Main Steam Line C		<u> </u>	R/Hr	10 ⁰ - 10 ⁶	
	Main Steam Line D		<u> </u>	R/Hr	10 ⁰ - 10 ⁶	
C910/1705-3	Air Ejector Off Gas		45.0 m	R/Hr	10 ⁰ - 10 ⁶	
C910/1705-4	A Loop RBCCW		<u>9900.0</u> CI	PS	10 ⁻¹ - 10 ⁶	
	B Loop RBCCW		13500.0 CF	PS	10 ⁻¹ - 10 ⁶	
C910/1705-8	Refuel Floor Vent		<u> </u>	R/Hr	10 ⁻¹ - 10 ³	
C910/1705-9	SBGT Exhaust		<u> </u>	R/Hr	10 ⁰ - 10 ⁴	
C910/1705-16	Control Rm Air Intake		0.05 ml	R/Hr	10 ⁻² - 10 ²	
C910/1705-30	R/W Discharge		<u>100.0</u> CF	PS	10 ⁻¹ - 10 ⁶	
C910/1705-5	Off Gas Post Treatment		400 CF	PS	10 ⁻¹ - 10 ⁶	
C170/1001-606	Drywell CHRMS A		1 R/	/Hr	10 ⁻¹ - 10 ⁷	
	Drywell CHRMS B		90 R/	/Hr	10 ⁻¹ - 10 ⁷	
C170/1001-607	Torus CHRMS A		1 R/	/Hr	10 ⁻¹ - 10 ⁷	
	Torus CHRMS B		9 R/	/Hr	10 ⁻¹ - 10 ⁷	
FLOW RATES SBGT (CFM) Rx Bldg (CFM)	Panel C7 <u>4000</u> ISOLATED			Main Sta TB Ver		CFM* CFM*
MET DATA Delta Temp (°F) Outside Temp (°F) Stability Class Precip	Panel MT1 -1.10 42.0 *		Dir (from) 1	220' * <u>160'</u> 118 10.0	<u>33'</u> 120	Deg. MPH
*Not Available In C	ontrol Room	00S-01	It of Service C	DSH-Off Scale	e Hi DS-Down	Scale

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THIS IS A DRILL

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5	PROCES	S RADIATION	I MO	NITOR	S		TIME:	1:15
Sec. 1	PANEL/ID NO.	MONITOR	TREND	READING		ALARM IN	RANG	
	C910/1705-18	Main Stack Lo		20.0	CPS		10 ⁻¹ - 10	6
	C910/1001-608	Main Stack Hi		DS	R/Hr		10 ⁻¹ - 10	4
	C910/1705-32	Rx Bldg Vent Lo		20.0	CPS		10 ⁻¹ - 10	6
	C910/1001-609	Rx Bldg Vent Hi		DS	R/Hr		10 ⁻¹ - 10	4
	C910/1001-610	Turbine Bldg Vent Hi		DS	R/Hr		10 ⁻¹ - 10	4
	C910/1705-2	Main Steam Line A		15_	mR/Hr		10 ⁰ - 10	6
		Main Steam Line B		18	mR/Hr		10 ⁰ - 10 ⁰	6
		Main Steam Line C		12	mR/Hr		10 ⁰ - 10	6
		Main Steam Line D		14	mR/Hr		10 ⁰ - 10 ⁰	6
	C910/1705-3	Air Ejector Off Gas		45.0	mR/Hr		10 ⁰ - 10 ⁶	6
	C910/1705-4	A Loop RBCCW		9000.0	CPS		10 ⁻¹ - 10 ⁰	6
		B Loop RBCCW		12000.0	CPS		10 ⁻¹ - 10 ⁶	6
	C910/1705-8	Refuel Floor Vent		5.0	mR/Hr		10 ⁻¹ - 10 ³	3
1. 	C910/1705-9	SBGT Exhaust		3.0	mR/Hr		10 ⁰ - 10'	4
	C910/1705-16	Control Rm Air Intake		0.05	mR/Hr		10 ⁻² - 10 ²	2
	C910/1705-30	R/W Discharge		100.0	CPS		10 ⁻¹ - 10 ⁶	6
	C910/1705-5	Off Gas Post Treatment		400	CPS		10 ⁻¹ - 10 ⁶	6
	C170/1001-606	Drywell CHRMS A		1	R/Hr		10 ⁻¹ - 10 ⁷	7
		Drywell CHRMS B		120	R/Hr		10 ⁻¹ - 10 ⁷	7
	C170/1001-607	Torus CHRMS A		1	R/Hr		10 ⁻¹ - 10 ⁷	7
		Torus CHRMS B		10	R/Hr		10 ⁻¹ - 10 ⁷	7
	FLOW RATES SBGT (CFM) Rx Bldg (CFM)	Panel C7 <u>4000</u> ISOLATED				Main Stack TB Vent		_CFM* CFM*
	<u>MET DATA</u> Delta Temp (°F) Outside Temp (°F) Stability Class Precip	Panel MT1 <u>-1.10</u> <u>42.0</u> *		Dir (from) Speed	<u>220'</u> <u>117</u> <u>11.0</u>	* <u>160'</u> 	<u>33'</u> <u>119</u> <u>9.7</u>	– Deg. MPH
1. 	*Not Available In C	ontrol Room	00S-0ı	ut of Service	OSH-	Off Scale Hi	DS-Dow	n Scale

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PROCES	S RADIATION	I MO	NITOR	S		TIME:	1:30
PANEL/ID NO.	MONITOR	TREND	READING		ALARM IN	RANG	E
C910/1705-18	Main Stack Lo		20.0	CPS		10 ⁻¹ - 10	e
C910/1001-608	Main Stack Hi		DS	R/Hr		10 ⁻¹ - 10	4
C910/1705-32	Rx Bldg Vent Lo		20.0	CPS		10 ⁻¹ - 10	e
C910/1001-609	Rx Bldg Vent Hi		DS	R/Hr		10 ⁻¹ - 10	4
C910/1001-610	Turbine Bldg Vent Hi		DS	R/Hr		10 ⁻¹ - 10	⁴
C910/1705-2	Main Steam Line A		15	mR/Hr		10 ⁰ - 10	6
	Main Steam Line B		18	mR/Hr		10 ⁰ - 10	6
	Main Steam Line C		12	mR/Hr		10 ⁰ - 10	6
	Main Steam Line D		14	mR/Hr		10 ⁰ - 10	e
C910/1705-3	Air Ejector Off Gas		45.0	mR/Hr		10 ⁰ - 10	e
C910/1705-4	A Loop RBCCW		8200.0	CPS		10 ⁻¹ - 10	6
	B Loop RBCCW		10000.0	CPS		10 ⁻¹ - 10	6
C910/1705-8	Refuel Floor Vent		5.0	mR/Hr		10 ⁻¹ - 10	3
C910/1705-9	SBGT Exhaust		3.0	mR/Hr		10 ⁰ - 10	4
C910/1705-16	Control Rm Air Intake		0.05	mR/Hr		10 ⁻² - 10	2
C910/1705-30	R/W Discharge		100.0	CPS		10 ⁻¹ - 10	6
C910/1705-5	Off Gas Post Treatment		400	CPS		10 ⁻¹ - 10	6
C170/1001-606	Drywell CHRMS A		1	R/Hr		10 ⁻¹ - 10	7
	Drywell CHRMS B		150	R/Hr		10 ⁻¹ - 10	7
C170/1001-607	Torus CHRMS A		1	R/Hr		10 ⁻¹ - 10	7
	Torus CHRMS B		15	R/Hr		10 ⁻¹ - 10	7
FLOW RATES SBGT (CFM) Rx Bldg (CFM)	Panel C7 <u>4000</u> ISOLATED				Main Stack TB Vent		_CFM* _CFM*
<u>MET DATA</u> Delta Temp (°F) Outside Temp (°F) Stability Class Precip	Panel MT1 <u>-1.10</u> <u>43.0</u> *		Dir (from) Speed	<u>220'</u> <u>116</u> 9.0	* <u>160'</u> 	<u>33'</u> <u>118</u> <u>7.7</u>	Deg. MPH
*Not Available In C	ontrol Room	00S-01	It of Service	OSH-0	Off Scale Hi	DS-Dov	vn Scale

	PROCES	S RADIATION	I MO	NITOF	RS		TIME:	1:45
~	PANEL/ID NO.	MONITOR	TREND	READING		ALARM IN	RANG	E
	C910/1705-18	Main Stack Lo		20.0	CPS		10 ⁻¹ - 10	le
	C910/1001-608	Main Stack Hi		DS	R/Hr		10 ⁻¹ - 10) ⁴
	C910/1705-32	Rx Bldg Vent Lo		20.0	CPS		10 ⁻¹ - 10	6
	C910/1001-609	Rx Bldg Vent Hi		DS	R/Hr		10 ⁻¹ - 10	⁴
	C910/1001-610	Turbine Bldg Vent Hi		DS	R/Hr		10 ⁻¹ - 10	4
	C910/1705-2	Main Steam Line A		15	mR/Hr		10 ⁰ - 10	6
		Main Steam Line B		18	mR/Hr		10 ⁰ - 10	6
		Main Steam Line C		12	mR/Hr		10 ⁰ - 10	6
		Main Steam Line D		14	mR/Hr		10 ⁰ - 10	6
	C910/1705-3	Air Ejector Off Gas		45.0	mR/Hr		10 ⁰ - 10	6
	C910/1705-4	A Loop RBCCW		7700.0	CPS		10 ⁻¹ - 10	6
		B Loop RBCCW		9000.0	CPS		10 ⁻¹ - 10	6
	C910/1705-8	Refuel Floor Vent		5.0	mR/Hr		10 ⁻¹ - 10	3
Same	C910/1705-9	SBGT Exhaust		3.0	mR/Hr		10 ⁰ - 10	4
	C910/1705-16	Control Rm Air Intake		0.05	mR/Hr		10 ⁻² - 10 ²	2
	C910/1705-30	R/W Discharge		100.0	CPS		10 ⁻¹ - 10 ⁴	6
	C910/1705-5	Off Gas Post Treatment		400	CPS		10 ⁻¹ - 10	6
	C170/1001-606	Drywell CHRMS A		1	R/Hr		10 ⁻¹ - 10	7
		Drywell CHRMS B		180	R/Hr		10 ⁻¹ - 10 ⁷	7
	C170/1001-607	Torus CHRMS A		1	R/Hr		10 ⁻¹ - 10 ⁻¹	7
		Torus CHRMS B		20	R/Hr		10 ⁻¹ - 10 ⁷	7
	FLOW RATES SBGT (CFM) Rx Bldg (CFM)	Panel C7 <u>4000</u> ISOLATED				Main Stack TB Vent		_CFM* _CFM*
	<u>MET DATA</u> Delta Temp (°F) Outside Temp (°F) Stability Class Precip	Panel MT1 -1.20 43.0 *		Dir (from) Speed	<u>220'</u> <u>116</u> <u>10.0</u>	* <u>160'</u> 	<u>33'</u> <u>118</u> <u>8.7</u>	– Deg. MPH
***********	*Not Available In C	ontrol Room	00S-01	t of Service	OSH-0	Off Scale Hi	DS-Dow	n Scale

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PROCES	S RADIATION	I MO	NITOF	RS		TIME:	2:00
PANEL/ID NO.	MONITOR	TREND	READING		ALARM IN	RANG	E
C910/1705-18	Main Stack Lo		20.0	CPS		10 ⁻¹ - 10) ⁶
C910/1001-608	Main Stack Hi		DS	R/Hr		10 ⁻¹ - 10) ⁴
C910/1705-32	Rx Bldg Vent Lo		20.0	CPS		10 ⁻¹ - 10) ⁶
C910/1001-609	Rx Bldg Vent Hi		DS	R/Hr		10 ⁻¹ - 10	4
C910/1001-610	Turbine Bldg Vent Hi		DS	R/Hr		10 ⁻¹ - 10	4
C910/1705-2	Main Steam Line A		15	mR/Hr		10 ⁰ - 10	6
	Main Steam Line B		18	mR/Hr		10 ⁰ - 10	6
	Main Steam Line C		12	mR/Hr		10 ⁰ - 10	6
	Main Steam Line D		14	mR/Hr		10 ⁰ - 10	6
C910/1705-3	Air Ejector Off Gas		45.0	mR/Hr		10 ⁰ - 10	6
C910/1705-4	A Loop RBCCW		6700.0	CPS		10 ⁻¹ - 10	6
	B Loop RBCCW		8500.0	CPS		10 ⁻¹ - 10	6
C910/1705-8	Refuel Floor Vent		5.0	mR/Hr		10 ⁻¹ - 10	3
C910/1705-9	SBGT Exhaust		3.0	mR/Hr		10 ⁰ - 10	4
C910/1705-16	Control Rm Air Intake		0.1	mR/Hr		10 ⁻² - 10	2
C910/1705-30	R/W Discharge		100.0	CPS		10 ⁻¹ - 10	6
C910/1705-5	Off Gas Post Treatment		400	CPS		10 ⁻¹ - 10	6
C170/1001-606	Drywell CHRMS A		1	R/Hr		10 ⁻¹ - 10	7
	Drywell CHRMS B		230	R/Hr		10 ⁻¹ - 10	7
C170/1001-607	Torus CHRMS A		1	R/Hr		10 ⁻¹ - 10	7
	Torus CHRMS B		25	R/Hr		10 ⁻¹ - 10	7
FLOW RATES SBGT (CFM) Rx Bldg (CFM)	Panel C7 <u>4000</u> ISOLATED				Main Stack TB Vent		_CFM* _CFM*
<u>MET DATA</u> Delta Temp (°F) Outside Temp (°F) Stability Class Precip	Panel MT1 <u>-1.20</u> <u>45.0</u> *		Dir (from) Speed	<u>220'</u> <u>117</u> <u>10.0</u>	* <u>160'</u> 	<u>33'</u> <u>119</u> <u>8.7</u>	Deg. MPH
*Not Available In Co	ontrol Room	00S-01	It of Service	OSH-	Off Scale Hi	DS-Dov	vn Scale

THIS IS A DRILL

99-06

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مىلىمىيەت		S RADIATION		NIIOR	S		TIME:	2:15
	PANEL/ID NO.	MONITOR	TREND	READING		ALARM IN	RANG	E
	C910/1705-18	Main Stack Lo		20.0	CPS		10 ⁻¹ - 10	6
	C910/1001-608	Main Stack Hi		DS F	₹/Hr		10 ⁻¹ - 10	4
	C910/1705-32	Rx Bldg Vent Lo		20.0	CPS		10 ⁻¹ - 10	6
	C910/1001-609	Rx Bldg Vent Hi		DS_F	R/Hr		10 ⁻¹ - 10	4
	C910/1001-610	Turbine Bldg Vent Hi			R/Hr		10 ⁻¹ - 10	4
	C910/1705-2	Main Steam Line A		<u>15</u> n	nR/Hr		10 ⁰ - 10	6
		Main Steam Line B		18 n	nR/Hr		10 ⁰ - 10	6
		Main Steam Line C		12 n	nR/Hr		10 ⁰ - 10	6
		Main Steam Line D		14 n	nR/Hr		10 ⁰ - 10	6
	C910/1705-3	Air Ejector Off Gas		45.0 n	nR/Hr		10 ⁰ - 10	6
	C910/1705-4	A Loop RBCCW		<u>6400.0</u> C	PS		10 ⁻¹ - 10	6
		B Loop RBCCW		8400.0 C	PS		10 ⁻¹ - 10	6
	C910/1705-8	Refuel Floor Vent		<u> </u>	nR/Hr		10 ⁻¹ - 10	3
	C910/1705-9	SBGT Exhaust		<u> </u>	nR/Hr		10 ⁰ - 10	4
	C910/1705-16	Control Rm Air Intake		<u>0.05</u> n	nR/Hr		10 ⁻² - 10 ²	2
	C910/1705-30	R/W Discharge		<u> 100.0</u> C	PS		10 ⁻¹ - 10	6
	C910/1705-5	Off Gas Post Treatment		<u>400</u> C	PS		10 ⁻¹ - 10 ⁰	5
	C170/1001-606	Drywell CHRMS A		1 R	R/Hr		10 ⁻¹ - 10	7
		Drywell CHRMS B		280 R	k/Hr		10 ⁻¹ - 10 ⁷	7
	C170/1001-607	Torus CHRMS A		1 R	k/Hr		10 ⁻¹ - 10 ⁷	7
		Torus CHRMS B		28 R	R/Hr		10 ⁻¹ - 10 ⁷	7
	FLOW RATES SBGT (CFM) Rx Bldg (CFM)	Panel C7 <u>4000</u> ISOLATED				Main Stack TB Vent		_CFM* _CFM*
	<u>MET DATA</u> Delta Temp (°F) Outside Temp (°F) Stability Class Precip	Panel MT1 <u>-1.30</u> <u>45.0</u> *		Dir (from) Speed	<u>220'</u> <u>117</u> <u>8.0</u>	* <u>160'</u> 	<u>33'</u> <u>119</u> <u>6.7</u>	Deg. MPH
\sim	*Not Available In C	ontrol Room	OOS-Ou	t of Service	OSH-C	Off Scale Hi	DS-Dow	n Scale

33-00

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PROCES	S RADIATION	I MO	NITOR	S		TIME:	2:30
PANEL/ID NO.	MONITOR	TREND	READING		ALARM IN	RANG	E
C910/1705-18	Main Stack Lo		20.0	CPS		10 ⁻¹ - 10	6
C910/1001-608	Main Stack Hi		DS	R/Hr		10 ⁻¹ - 10	4
C910/1705-32	Rx Bldg Vent Lo		20.0	CPS		10 ⁻¹ - 10	e
C910/1001-609	Rx Bldg Vent Hi		DS	R/Hr		10 ⁻¹ - 10	4
C910/1001-610	Turbine Bldg Vent Hi		DS	R/Hr		10 ⁻¹ - 10	4
C910/1705-2	Main Steam Line A		15	mR/Hr		10 ⁰ - 10	6
	Main Steam Line B		<u>18</u> ı	mR/Hr		10 ⁰ - 10	6
	Main Steam Line C		12 1	mR/Hr		10 ⁰ - 10	6
	Main Steam Line D		14 ı	mR/Hr		10 ⁰ - 10	6
C910/1705-3	Air Ejector Off Gas		45.0 ו	mR/Hr		10 ⁰ - 10	6
C910/1705-4	A Loop RBCCW		5800.0	CPS		10 ⁻¹ - 10	e.
	B Loop RBCCW		7000.0	CPS		10 ⁻¹ - 10	6
C910/1705-8	Refuel Floor Vent		<u> </u>	mR/Hr		10 ⁻¹ - 10	3
C910/1705-9	SBGT Exhaust		<u>3</u> r	mR/Hr		10 ⁰ - 10	4
C910/1705-16	Control Rm Air Intake		<u> </u>	mR/Hr		10 ⁻² - 10 ²	2
C910/1705-30	R/W Discharge		100.0	CPS		10 ⁻¹ - 10	6
C910/1705-5	Off Gas Post Treatment		400 (CPS		10 ⁻¹ - 10	6
C170/1001-606	Drywell CHRMS A		1 F	R/Hr		10 ⁻¹ - 10	7
	Drywell CHRMS B		<u> </u>	R/Hr		10 ⁻¹ - 10	7
C170/1001-607	Torus CHRMS A		1 F	R/Hr		10 ⁻¹ - 10	7
	Torus CHRMS B		30	R/Hr		10 ⁻¹ - 10	7
FLOW RATES SBGT (CFM) Rx Bldg (CFM)	Panel C7 <u>4000</u> ISOLATED				Main Stack TB Vent		_CFM* _CFM*
<u>MET DATA</u> Delta Temp (°F) Outside Temp (°F) Stability Class Precip	Panel MT1 - <u>1.20</u> 46.0 *		Dir (from) Speed	<u>220'</u> <u>116</u> <u>10.0</u>	* <u>160'</u> 	<u>33'</u> <u>118</u> <u>8.7</u>	Deg. MPH
*Not Available In C	ontrol Room	OOS-Ou	t of Service	OSH-0	Off Scale Hi	DS-Dow	n Scale

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33-00

PROCES	S RADIATION	I MO	NITOF	RS		TIME:	2:45
PANEL/ID NO.	MONITOR	TREND	READING		ALARM IN	RANGE	
C910/1705-18	Main Stack Lo		20.0	CPS		10 ⁻¹ - 10	6
C910/1001-608	Main Stack Hi		DS	R/Hr		10 ⁻¹ - 10'	1
C910/1705-32	Rx Bldg Vent Lo		20.0	CPS		10 ⁻¹ - 10 ⁶	6
C910/1001-609	Rx Bldg Vent Hi		DS	R/Hr		10 ⁻¹ - 10'	1
C910/1001-610	Turbine Bldg Vent Hi		DS	R/Hr		10 ⁻¹ - 10'	l
C910/1705-2	Main Steam Line A		15	mR/Hr		10 ⁰ - 10 ⁶	3
	Main Steam Line B		18	mR/Hr		10 ⁰ - 10 ⁶	5
	Main Steam Line C		12	mR/Hr		10 ⁰ - 10 ⁶	5
	Main Steam Line D		14	mR/Hr		10 ⁰ - 10 ⁶	;
C910/1705-3	Air Ejector Off Gas		45.0	mR/Hr		10 ⁰ - 10 ⁶	;
C910/1705-4	A Loop RBCCW		5200.0	CPS		10 ⁻¹ - 10 ⁶	;
	B Loop RBCCW		6800.0	CPS		10 ⁻¹ - 10 [€]	;
C910/1705-8	Refuel Floor Vent		5	mR/Hr		10 ⁻¹ - 10 ³	;
C910/1705-9	SBGT Exhaust		3	mR/Hr		10 ⁰ - 10 ⁴	L .
C910/1705-16	Control Rm Air Intake		0.05	mR/Hr		10 ⁻² - 10 ²	:
C910/1705-30	R/W Discharge		100.0	CPS		10 ⁻¹ - 10 ⁶	:
C910/1705-5	Off Gas Post Treatment		400	CPS		10 ⁻¹ - 10 ⁶	;
C170/1001-606	Drywell CHRMS A		1	R/Hr		10 ⁻¹ - 10 ⁷	
	Drywell CHRMS B		350	R/Hr		10 ⁻¹ - 10 ⁷	
C170/1001-607	Torus CHRMS A		1	R/Hr		10 ⁻¹ - 10 ⁷	
	Torus CHRMS B		35	R/Hr		10 ⁻¹ - 10 ⁷	
FLOW RATES SBGT (CFM) Rx Bldg (CFM)	Panel C7 <u>4000</u> ISOLATED				Main Stack TB Vent		CFM* CFM*
MET DATA Delta Temp (°F) Outside Temp (°F) Stability Class Precip	Panel MT1 <u>-1.20</u> <u>46.0</u> *		Dir (from) Speed	<u>220'</u> <u>116</u> <u>9.0</u>	* <u>160'</u> 	<u>33'</u> <u>118</u> <u>7.7</u>	Deg. MPH
*Not Available In C	ontrol Room	00S-01	ut of Service	OSH-	Off Scale Hi	DS-Dow	n Scale

PROCES	S RADIATION	I MO	NITOF	RS		TIME:	3:00
PANEL/ID NO.	MONITOR	TREND	READING		ALARM IN	RANG	Ε
C910/1705-18	Main Stack Lo		20.0	CPS		10 ⁻¹ - 10	6
C910/1001-608	Main Stack Hi		DS	R/Hr		10 ⁻¹ - 10	4
C910/1705-32	Rx Bldg Vent Lo		20.0	CPS		10 ⁻¹ - 10	6
C910/1001-609	Rx Bldg Vent Hi		DS	R/Hr		10 ⁻¹ - 10	4
C910/1001-610	Turbine Bldg Vent Hi		DS	R/Hr		10 ⁻¹ - 10	4
C910/1705-2	Main Steam Line A		15	mR/Hr		10 ⁰ - 10	6
	Main Steam Line B		18	mR/Hr		10 ⁰ - 10	6
	Main Steam Line C		12	mR/Hr		10 ⁰ - 10	6
	Main Steam Line D		14	mR/Hr		10 ⁰ - 10	6
C910/1705-3	Air Ejector Off Gas		45.0	mR/Hr		10 ⁰ - 10	6
C910/1705-4	A Loop RBCCW		2800.0	CPS		10 ⁻¹ - 10	6
	B Loop RBCCW		5600.0	CPS		10 ⁻¹ - 10	6
C910/1705-8	Refuel Floor Vent		5	mR/Hr		10 ⁻¹ - 10 ⁵	3
C910/1705-9	SBGT Exhaust		3	mR/Hr		10 ⁰ - 10	4
C910/1705-16	Control Rm Air Intake		0.05	mR/Hr		10 ⁻² - 10 ²	2
C910/1705-30	R/W Discharge		100.0	CPS		10 ⁻¹ - 10 ⁰	6
C910/1705-5	Off Gas Post Treatment		400	CPS		10 ⁻¹ - 10 ⁶	6
C170/1001-606	Drywell CHRMS A		1	R/Hr		10 ⁻¹ - 10 ⁷	7
	Drywell CHRMS B		360	R/Hr		10 ⁻¹ - 10 ⁷	7
C170/1001-607	Torus CHRMS A		1	R/Hr		10 ⁻¹ - 10 ⁷	7
	Torus CHRMS B		38	R/Hr		10 ⁻¹ - 10 ⁷	7
FLOW RATES SBGT (CFM) Rx Bldg (CFM)	Panel C7 <u>4000</u> ISOLATED				Main Stack TB Vent		_CFM* _CFM*
<u>MET DATA</u> Delta Temp (°F) Dutside Temp (°F) Stability Class Precip	Panel MT1 <u>-1.00</u> <u>46.0</u> *		Dir (from) Speed	<u>220'</u> <u>115</u> <u>9.0</u>	* <u>160'</u> 	<u>33'</u> <u>117</u> <u>7.7</u>	Deg. MPH
Not Available In C	ontrol Room	005-01	it of Service	000	Off Scale Hi		n Saala

*Not Available In Control Room

OOS-Out of Service OSH-Off Scale Hi DS-Down Scale

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PROCES	S RADIATION	I MO	NITOF	RS		TIME:	3:15
PANEL/ID NO.	MONITOR	TREND	READING		ALARM IN	RANG	E
C910/1705-18	Main Stack Lo		1.00E+05	CPS	Hi Hi	10 ⁻¹ - 10) _e
C910/1001-608	Main Stack Hi		DS	R/Hr		10 ⁻¹ - 10) ⁴
C910/1705-32	Rx Bldg Vent Lo		20.0	CPS		10 ⁻¹ - 10) _e
C910/1001-609	Rx Bldg Vent Hi		DS	R/Hr		10 ⁻¹ - 10	⁴
C910/1001-610	Turbine Bldg Vent Hi		DS	R/Hr		10 ⁻¹ - 10	⁴
C910/1705-2	Main Steam Line A		15	mR/Hr		10 ⁰ - 10	6
	Main Steam Line B		18	mR/Hr		10 ⁰ - 10	6
	Main Steam Line C		12	mR/Hr		10 ⁰ - 10	e
	Main Steam Line D		14	mR/Hr		10 ⁰ - 10	6
C910/1705-3	Air Ejector Off Gas		45.0	mR/Hr		10 ⁰ - 10	6
C910/1705-4	A Loop RBCCW		1800.0	CPS		10 ⁻¹ - 10	6
	B Loop RBCCW		4400.0	CPS		10 ⁻¹ - 10	6
C910/1705-8	Refuel Floor Vent		5	mR/Hr		10 ⁻¹ - 10	3
C910/1705-9	SBGT Exhaust		200	mR/Hr	Hi	10 ⁰ - 10	4
C910/1705-16	Control Rm Air Intake		0.05	mR/Hr		10 ⁻² - 10	2
C910/1705-30	R/W Discharge		100.0	CPS		10 ⁻¹ - 10	6
C910/1705-5	Off Gas Post Treatment		400	CPS		10 ⁻¹ - 10	6
C170/1001-606	Drywell CHRMS A		1	R/Hr		10 ⁻¹ - 10	7
	Drywell CHRMS B		380	R/Hr		10 ⁻¹ - 10	7
C170/1001-607	Torus CHRMS A		1	R/Hr		10 ⁻¹ - 10	7
	Torus CHRMS B		40	R/Hr		10 ⁻¹ - 10	7
FLOW RATES SBGT (CFM) Rx Bldg (CFM)	Panel C7 <u>4000</u> ISOLATED				Main Stack TB Vent		_CFM* _CFM*
MET DATA Delta Temp (°F) Outside Temp (°F) Stability Class Precip	Panel MT1 -1.00 47.0 *		Dir (from) Speed	<u>220'</u> <u>115</u> 9.0	* <u>160'</u> 	<u>33'</u> <u>117</u> <u>7.7</u>	Deg. MPH
*Not Available In Co	ontrol Room	OOS-Ou	t of Service	OSH-0	Off Scale Hi	DS-Dow	n Scale

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99-06

PROCES	S RADIATION		NITOR	S		TIME:	3:30
PANEL/ID NO.	MONITOR	TREND	READING		ALARM IN	RANG	E
C910/1705-18	Main Stack Lo		5.00E+05	CPS	Hi Hi	10 ⁻¹ - 10	6
C910/1001-608	Main Stack Hi		DS	R/Hr		10 ⁻¹ - 10	4
C910/1705-32	Rx Bldg Vent Lo		20.0	CPS		10 ⁻¹ - 10	6
C910/1001-609	Rx Bldg Vent Hi		DS	R/Hr		10 ⁻¹ - 10	4
C910/1001-610	Turbine Bldg Vent Hi		DS	R/Hr		10 ⁻¹ - 10	4
C910/1705-2	Main Steam Line A		15	mR/Hr		10 ⁰ - 10	6
	Main Steam Line B		18	mR/Hr		10 ⁰ - 10	e
	Main Steam Line C		12	mR/Hr		10 ⁰ - 10	6
	Main Steam Line D		14	mR/Hr		10 ⁰ - 10	e
C910/1705-3	Air Ejector Off Gas		45.0	mR/Hr		10 ⁰ - 10	6
C910/1705-4	A Loop RBCCW		1500.0	CPS		10 ⁻¹ - 10	6
	B Loop RBCCW		3500.0	CPS		10 ⁻¹ - 10	6
C910/1705-8	Refuel Floor Vent		5	mR/Hr		10 ⁻¹ - 10	3
C910/1705-9	SBGT Exhaust		400	mR/Hr	Hi	10 ⁰ - 10	4
C910/1705-16	Control Rm Air Intake		0.05	mR/Hr		10 ⁻² - 10	2
C910/1705-30	R/W Discharge		100.0	CPS		10 ⁻¹ - 10	6
C910/1705-5	Off Gas Post Treatment		400	CPS		10 ⁻¹ - 10	6
C170/1001-606	Drywell CHRMS A		1	R/Hr		10 ⁻¹ - 10	7
	Drywell CHRMS B		380	R/Hr		10 ⁻¹ - 10	7
C170/1001-607	Torus CHRMS A		1	R/Hr		10 ⁻¹ - 10	7
	Torus CHRMS B		40	R/Hr		10 ⁻¹ - 10	7
FLOW RATES SBGT (CFM) Rx Bldg (CFM)	Panel C7 <u>4000</u> ISOLATED				Main Stack TB Vent		_CFM* _CFM*
<u>MET DATA</u> Delta Temp (°F) Outside Temp (°F) Stability Class Precip	Panel MT1 <u>-1.00</u> <u>48.0</u> *		Dir (from) Speed	<u>220'</u> <u>115</u> <u>8.0</u>	* <u>160'</u> 	<u>33'</u> <u>117</u> <u>6.7</u>	Deg. MPH
*Not Available In C	ontrol Room	00S-01	It of Service	OSH-	Off Scale Hi	DS-Dov	vn Scale

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	S RADIATION	I MO	NITOF	RS		TIME:	3:45
PANEL/ID NO.	MONITOR	TREND	READING		ALARM IN	RANG	E
C910/1705-18	Main Stack Lo		5.0E+05	CPS	Hi Hi	10 ⁻¹ - 10) _e
C910/1001-608	Main Stack Hi		DS	R/Hr		10 ⁻¹ - 10) ⁴
C910/1705-32	Rx Bldg Vent Lo		20.0	CPS		10 ⁻¹ - 10) _e
C910/1001-609	Rx Bldg Vent Hi		DS	R/Hr		10 ⁻¹ - 10) ⁴
C910/1001-610	Turbine Bldg Vent Hi		DS	R/Hr		10 ⁻¹ - 10	4
C910/1705-2	Main Steam Line A		1.5E+01	mR/Hr		10 ⁰ - 10	6
	Main Steam Line B		1.8E+01	mR/Hr		10 ⁰ - 10	6
	Main Steam Line C		1.2E+01	mR/Hr		10 ⁰ - 10	6
	Main Steam Line D		1.4E+01	mR/Hr		10 ⁰ - 10	e
C910/1705-3	Air Ejector Off Gas		45.0	mR/Hr		10 ⁰ - 10	6
C910/1705-4	A Loop RBCCW		1200.0	CPS		10 ⁻¹ - 10	e
	B Loop RBCCW		2000.0	CPS		10 ⁻¹ - 10	6
C910/1705-8	Refuel Floor Vent		5	mR/Hr		10 ⁻¹ - 10	3
C910/1705-9	SBGT Exhaust		700	mR/Hr	Hi	10 ⁰ - 10	4
C910/1705-16	Control Rm Air Intake		0.05	mR/Hr		10 ⁻² - 10	2
C910/1705-30	R/W Discharge		100.0	CPS		10 ⁻¹ - 10	6
C910/1705-5	Off Gas Post Treatment		400	CPS		10 ⁻¹ - 10	6
C170/1001-606	Drywell CHRMS A		1	R/Hr		10 ⁻¹ - 10	7
	Drywell CHRMS B		380	R/Hr		10 ⁻¹ - 10	7
C170/1001-607	Torus CHRMS A		1	R/Hr		10 ⁻¹ - 10	7
	Torus CHRMS B		40	R/Hr		10 ⁻¹ - 10	7
FLOW RATES SBGT (CFM)	Panel C7 <u>4000</u>				Main Ot1		
Rx Bldg (CFM)	ISOLATED				Main Stack TB Vent		_CFM* _CFM*
MET DATA	Panel MT1			<u>220'</u>	* <u>160'</u>	<u>33'</u>	
Delta Temp (°F)	<u>-1.10</u>		Dir (from)	<u>114</u>		<u>116</u>	Deg.
Outside Temp (°F)	<u>48.0</u>		Speed	<u>8.0</u>		<u>6.7</u>	MPH
Stability Class Precip	*						

		NITOR	-	TIME:	4:
PANEL/ID NO.	MONITOR	READING	ALAR		
C910/1705-18	Main Stack Lo	4.00E+05 C	PS Hil		
C910/1001-608	Main Stack Hi	DS R	/Hr	10 ⁻¹ - 10 ⁴	
C910/1705-32	Rx Bldg Vent Lo	<u>20.0</u> C	PS	10 ⁻¹ - 10 ⁶	
C910/1001-609	Rx Bldg Vent Hi	DS R	/Hr	10 ⁻¹ - 10 ⁴	
C910/1001-610	Turbine Bldg Vent Hi	DS R	/Hr	10 ⁻¹ - 10 ⁴	
C910/1705-2	Main Steam Line A	<u>1.5E+01</u> m	R/Hr	10 ⁰ - 10 ⁶	
	Main Steam Line B	<u>1.8E+01</u> m	R/Hr	10 ⁰ - 10 ⁶	
	Main Steam Line C	<u>1.2E+01</u> m	R/Hr	10 ⁰ - 10 ⁶	
	Main Steam Line D	<u>1.4E+01</u> m	R/Hr	10 ⁰ - 10 ⁶	
C910/1705-3	Air Ejector Off Gas	<u> </u>	R/Hr	10 ⁰ - 10 ⁶	
C910/1705-4	A Loop RBCCW	800.0 C	PS	10 ⁻¹ - 10 ⁶	
	B Loop RBCCW	1500.0 C	PS	10 ⁻¹ - 10 ⁶	
C910/1705-8	Refuel Floor Vent	5 m	R/Hr	10 ⁻¹ - 10 ³	
C910/1705-9	SBGT Exhaust	800 m	R/Hr Hi	10 ⁰ - 10 ⁴	
C910/1705-16	Control Rm Air Intake	0.1 m	R/Hr	10 ⁻² - 10 ²	
C910/1705-30	R/W Discharge	100.0 CI	⊳s	10 ⁻¹ - 10 ⁶	
C910/1705-5	Off Gas Post Treatment	400 CI	>s	10 ⁻¹ - 10 ⁶	
C170/1001-606	Drywell CHRMS A	 1 R/	Hr	10 ⁻¹ - 10 ⁷	
	Drywell CHRMS B	380 R/	Hr	10 ⁻¹ - 10 ⁷	
C170/1001-607	Torus CHRMS A	 1 R/	Hr	10 ⁻¹ - 10 ⁷	
	Torus CHRMS B	40 R/	Hr	10 ⁻¹ - 10 ⁷	
FLOW RATES SBGT (CFM) Rx Bldg (CFM)	Panel C7 <u>4000</u> ISOLATED		Main St TB Ve		CFM* CFM*
<u>MET DATA</u> Delta Temp (°F) Outside Temp (°F) Stability Class Precip	Panel MT1 -1.10 50.0 *	Dir (from)	220' * <u>160</u> 114 8.0	<u>116</u> [Deg. MPH

PROCES	S RADIATION	I MO	NITORS		TIME:	4:15
PANEL/ID NO.	MONITOR	TREND	READING	ALARM IN	RANGE	
C910/1705-18	Main Stack Lo		4.0E+05 CP	6 Hi Hi	10 ⁻¹ - 10 ⁶	
C910/1001-608	Main Stack Hi		DS R/H	r	10 ⁻¹ - 10 ⁴	
C910/1705-32	Rx Bldg Vent Lo		20.0 CPS	3	10 ⁻¹ - 10 ⁶	
C910/1001-609	Rx Bldg Vent Hi		DS R/H	r	10 ⁻¹ - 10 ⁴	
C910/1001-610	Turbine Bldg Vent Hi		DS R/H	r	10 ⁻¹ - 10 ⁴	
C910/1705-2	Main Steam Line A		<u>1.5E+01</u> mR	/Hr	10 ⁰ - 10 [€]	
	Main Steam Line B		1.8E+01 mR	/Hr	10 ⁰ - 10 ⁶	
	Main Steam Line C		1.2E+01 mR	/Hr	10 ⁰ - 10 ⁶	
	Main Steam Line D		1.4E+01 mR	/Hr	10 ⁰ - 10 ⁶	
C910/1705-3	Air Ejector Off Gas		45.0 mR/	′Hr	10 ⁰ - 10 ⁶	
C910/1705-4	A Loop RBCCW		800.0 CPS	;	10 ⁻¹ - 10 ⁶	
	B Loop RBCCW		1500.0 CPS	;	10 ⁻¹ - 10 ⁶	
C910/1705-8	Refuel Floor Vent		<u>5.0</u> mR/	'Hr	10 ⁻¹ - 10 ³	
C910/1705-9	SBGT Exhaust		800.0 mR/	'Hr Hi	10 ⁰ - 10 ⁴	
C910/1705-16	Control Rm Air Intake		0.1 mR/	Hr	10 ⁻² - 10 ²	
C910/1705-30	R/W Discharge		100.0 CPS		10 ⁻¹ - 10 ⁶	
C910/1705-5	Off Gas Post Treatment		400.0 CPS		10 ⁻¹ - 10 ⁶	
C170/1001-606	Drywell CHRMS A		1.0 R/H	r	10 ⁻¹ - 10 ⁷	
	Drywell CHRMS B		380.0 R/H	r	10 ⁻¹ - 10 ⁷	
C170/1001-607	Torus CHRMS A		1.0 R/H	r	10 ⁻¹ - 10 ⁷	
	Torus CHRMS B		40.0 R/H	r	10 ⁻¹ - 10 ⁷	
FLOW RATES SBGT (CFM) Rx Bldg (CFM)	Panel C7 <u>4000</u> ISOLATED			Main Stack TB Vent		CFM* CFM*
<u>MET DATA</u> Delta Temp (°F) Outside Temp (°F) Stability Class Precip	Panel MT1 -1.20 50.0 *		22 Dir (from) <u>115</u> Speed <u>8.</u>	<u>.0</u>		Deg. MPH
*Not Available In C	ontrol Room	005-0	ut of Service OS	H-Off Scale Hi	DS-Down	Scale

	PROCES	S RADIATION	I MO	NITOR	S	<u></u>	TIME:	4:30
	PANEL/ID NO.	MONITOR	TREND	READING		ALARM IN	RANG	
	C910/1705-18	Main Stack Lo		3.00E+05	CPS	Hi Hi	10 ⁻¹ - 10	6
	C910/1001-608	Main Stack Hi		DS I	R/Hr		10 ⁻¹ - 10	4
	C910/1705-32	Rx Bldg V∾nt Lo		20.0	CPS		10 ⁻¹ - 10	6
	C910/1001-609	Rx Bldg Vent Hi		DS I	R/Hr		10 ⁻¹ - 10	4
	C910/1001-610	Turbine Bldg Vent Hi		DS I	R/Hr		10 ⁻¹ - 10	4
	C910/1705-2	Main Steam Line A		<u>1.5E+01</u> r	mR/Hr		10 [°] - 10 [°]	5
		Main Steam Line B		<u>1.8E+01</u> r	mR/Hr		10 ⁰ - 10 ⁶	6
		Main Steam Line C		1.2E+01 r	mR/Hr		10 ⁰ - 10 ⁶	5
		Main Steam Line D		<u>1.4E+01</u> r	mR/Hr		10 ⁰ - 10 ⁶	3
	C910/1705-3	Air Ejector Off Gas		<u> </u>	nR/Hr		10 ⁰ - 10 ⁶	5
	C910/1705-4	A Loop RBCCW		800.0	CPS		10 ⁻¹ - 10 ⁶	6
		B Loop RBCCW		1500.0	CPS		10 ⁻¹ - 10 ⁶	5
	C910/1705-8	Refuel Floor Vent		<u> </u>	nR/Hr		10 ⁻¹ - 10 ³	5
1. 	C910/1705-9	SBGT Exhaust		<u> </u>	nR/Hr	Hi	10 ⁰ - 10⁴	ļ
	C910/1705-16	Control Rm Air Intake		<u> </u>	nR/Hr		10 ⁻² - 10 ²	2
	C910/1705-30	R/W Discharge		100.0	CPS		10 ⁻¹ - 10 ⁶	i
	C910/1705-5	Off Gas Post Treatment		400.0	CPS		10 ⁻¹ - 10 ⁶	;
	C170/1001-606	Drywell CHRMS A		<u> </u>	R/Hr		10 ⁻¹ - 10 ⁷	
		Drywell CHRMS B		<u>380.0</u> F	₹/Hr		10 ⁻¹ - 10 ⁷	
	C170/1001-607	Torus CHRMS A		<u> </u>	R/Hr		10 ⁻¹ - 10 ⁷	
		Torus CHRMS B		<u>40.0</u> F	₹/Hr		10 ⁻¹ - 10 ⁷	
	FLOW RATES SBGT (CFM) Rx Bldg (CFM)	Panel C7 <u>4000</u> ISOLATED				Main Stack TB Vent		CFM* CFM*
	MET DATA Delta Temp (°F) Outside Temp (°F) Stability Class Precip	Panel MT1 <u>-1.20</u> <u>52.0</u> <u>*</u>		Dir (from) Speed	<u>220'</u> <u>115.0</u> <u>8.0</u>	* <u>160'</u>	<u>33'</u> <u>117.0</u> <u>6.7</u>	Deg. MPH
<u></u>	*Not Available In C	ontrol Room	OOS-Ou	t of Service	OSH-C	Off Scale Hi	DS-Dow	n Scale

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| PROCES                                                                               | SS RADIATION                           | N MO   | NITOF               | RS                   |                                             | TIME:                                    | 4:45        |
|--------------------------------------------------------------------------------------|----------------------------------------|--------|---------------------|----------------------|---------------------------------------------|------------------------------------------|-------------|
| PANEL/ID NO.                                                                         | MONITOR                                | TREND  | READING             |                      | ALARM IN                                    | RANGE                                    |             |
| C910/1705-18                                                                         | Main Stack Lo                          |        | 1.00E+05            | CPS                  | Hi Hi                                       | 10 <sup>-1</sup> - 10                    | \$          |
| C910/1001-608                                                                        | Main Stack Hi                          |        | DS                  | R/Hr                 |                                             | 10 <sup>-1</sup> - 10'                   | 1           |
| C910/1705-32                                                                         | Rx Bldg Vent Lo                        |        | 20.0                | CPS                  |                                             | 10 <sup>-1</sup> - 10 <sup>0</sup>       | 5           |
| C910/1001-609                                                                        | Rx Bldg Vent Hi                        |        | DS                  | R/Hr                 |                                             | 10 <sup>-1</sup> - 10'                   | ŧ           |
| C910/1001-610                                                                        | Turbine Bldg Vent Hi                   |        | DS                  | R/Hr                 |                                             | 10 <sup>-1</sup> - 10 <sup>4</sup>       | L           |
| C910/1705-2                                                                          | Main Steam Line A                      |        | 1.5E+01             | mR/Hr                |                                             | 10 <sup>0</sup> - 10 <sup>6</sup>        | :           |
|                                                                                      | Main Steam Line B                      |        | <u>1.8E+01</u>      | mR/Hr                |                                             | 10 <sup>0</sup> - 10 <sup>6</sup>        | i           |
|                                                                                      | Main Steam Line C                      |        | 1.2E+01             | mR/Hr                |                                             | 10 <sup>0</sup> - 10 <sup>6</sup>        |             |
|                                                                                      | Main Steam Line D                      |        | 1.4E+01             | mR/Hr                |                                             | 10 <sup>0</sup> - 10 <sup>6</sup>        |             |
| C910/1705-3                                                                          | Air Ejector Off Gas                    |        | 45.0                | mR/Hr                |                                             | 10 <sup>0</sup> - 10 <sup>6</sup>        |             |
| C910/1705-4                                                                          | A Loop RBCCW                           |        | 800.0               | CPS                  |                                             | 10 <sup>-1</sup> - 10 <sup>6</sup>       |             |
|                                                                                      | B Loop RBCCW                           |        | 1500.0              | CPS                  |                                             | 10 <sup>-1</sup> - 10 <sup>6</sup>       |             |
| C910/1705-8                                                                          | <b>Refuel Floor Vent</b>               |        | 5.0                 | mR/Hr                |                                             | 10 <sup>-1</sup> - 10 <sup>3</sup>       |             |
| C910/1705-9                                                                          | SBGT Exhaust                           |        | 800.0               | mR/Hr                | Hi                                          | 10 <sup>0</sup> - 10 <sup>4</sup>        |             |
| C910/1705-16                                                                         | Control Rm Air Intake                  |        | 0.1                 | mR/Hr                |                                             | 10 <sup>-2</sup> - 10 <sup>2</sup>       |             |
| C910/1705-30                                                                         | R/W Discharge                          |        | 100.0               | CPS                  |                                             | 10 <sup>-1</sup> - 10 <sup>6</sup>       |             |
| C910/1705-5                                                                          | Off Gas Post Treatment                 |        | 400.0               | CPS                  |                                             | 10 <sup>-1</sup> - 10 <sup>6</sup>       |             |
| C170/1001-606                                                                        | Drywell CHRMS A                        |        | 1.0                 | R/Hr                 |                                             | 10 <sup>-1</sup> - 10 <sup>7</sup>       |             |
|                                                                                      | Drywell CHRMS B                        |        | 380.0               | R/Hr                 |                                             | 10 <sup>-1</sup> - 10 <sup>7</sup>       |             |
| C170/1001-607                                                                        | Torus CHRMS A                          |        | 1.0                 | R/Hr                 |                                             | 10 <sup>-1</sup> - 10 <sup>7</sup>       |             |
|                                                                                      | Torus CHRMS B                          |        | 40.0                | R/Hr                 |                                             | 10 <sup>-1</sup> - 10 <sup>7</sup>       |             |
| FLOW RATES<br>SBGT (CFM)<br>Rx Bldg (CFM)                                            | Panel C7<br><u>4000</u><br>ISOLATED    |        |                     |                      | Main Stack<br>TB Vent                       | <u>20000</u><br>140000                   |             |
| <b>MET DATA</b><br>Delta Temp (°F)<br>Dutside Temp (°F)<br>Stability Class<br>Precip | Panel MT1<br><u>-1.20</u><br>52.0<br>* |        | Dir (from)<br>Speed | 220'<br>115.0<br>8.0 | * <u>160'</u><br><u>113.0</u><br><u>7.5</u> | <u>33'</u><br><u>117.0</u><br><u>6.7</u> | Deg.<br>MPH |
| Not Available In C                                                                   | control Room                           | OOS-Ou | t of Service        | OSH-0                | Off Scale Hi                                | DS-Dowr                                  | i Scale     |

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| PROCES                                                                        | S RADIATION                         |        | NITORS                                            |                       | TIME:                              | E-00         |
|-------------------------------------------------------------------------------|-------------------------------------|--------|---------------------------------------------------|-----------------------|------------------------------------|--------------|
| PANEL/ID NO.                                                                  | MONITOR                             | TREND  | READING                                           | ALARM IN              | RANGE                              | 5:00         |
| C910/1705-18                                                                  | Main Stack Lo                       |        | 9.00E+04 CPS                                      |                       | 10 <sup>-1</sup> - 10 <sup>6</sup> |              |
| C910/1001-608                                                                 | Main Stack Hi                       |        | DS R/H                                            |                       | 10 <sup>-1</sup> - 10 <sup>4</sup> |              |
| C910/1705-32                                                                  | Rx Bldg Vent Lo                     |        | 20.0 CPS                                          |                       | 10 <sup>-1</sup> - 10 <sup>6</sup> |              |
| C910/1001-609                                                                 | Rx Bldg Vent Hi                     |        | DS R/H                                            | ·                     | 10 <sup>-1</sup> - 10 <sup>4</sup> |              |
| C910/1001-610                                                                 | Turbine Bldg Vent Hi                |        | DS_R/Hr                                           |                       | 10 <sup>-1</sup> - 10 <sup>4</sup> |              |
| C910/1705-2                                                                   | Main Steam Line A                   |        | 1.5E+01 mR/                                       | Hr                    | 10 <sup>0</sup> - 10 <sup>6</sup>  |              |
|                                                                               | Main Steam Line B                   |        | 1.8E+01 mR/                                       | Hr                    | 10 <sup>0</sup> - 10 <sup>6</sup>  |              |
|                                                                               | Main Steam Line C                   |        | 1.2E+01 mR/                                       | Hr                    | 10 <sup>0</sup> - 10 <sup>6</sup>  |              |
|                                                                               | Main Steam Line D                   |        | 1.4E+01 mR/I                                      | -Ir                   | 10 <sup>0</sup> - 10 <sup>6</sup>  |              |
| C910/1705-3                                                                   | Air Ejector Off Gas                 |        | <u>45.0</u> mR/l                                  | -lr                   | 10 <sup>0</sup> - 10 <sup>6</sup>  |              |
| C910/1705-4                                                                   | A Loop RBCCW                        |        | 800.0 CPS                                         |                       | 10 <sup>-1</sup> - 10 <sup>6</sup> |              |
|                                                                               | B Loop RBCCW                        |        | 1500.0 CPS                                        |                       | 10 <sup>-1</sup> - 10 <sup>6</sup> |              |
| C910/1705-8                                                                   | <b>Refuel Floor Vent</b>            |        | <u> </u>                                          | łr                    | 10 <sup>-1</sup> - 10 <sup>3</sup> |              |
| C910/1705-9                                                                   | SBGT Exhaust                        |        | <u> </u>                                          | lr Hi                 | 10 <sup>0</sup> - 10 <sup>4</sup>  |              |
| C910/1705-16                                                                  | Control Rm Air Intake               |        | 0.05 mR/l                                         | łr 🔄                  | 10 <sup>-2</sup> - 10 <sup>2</sup> |              |
| C910/1705-30                                                                  | R/W Discharge                       |        | 100.0 CPS                                         |                       | 10 <sup>-1</sup> - 10 <sup>6</sup> |              |
| C910/1705-5                                                                   | Off Gas Post Treatment              |        | 400.0 CPS                                         |                       | 10 <sup>-1</sup> - 10 <sup>6</sup> |              |
| C170/1001-606                                                                 | Drywell CHRMS A                     |        | <u> </u>                                          |                       | 10 <sup>-1</sup> - 10 <sup>7</sup> |              |
|                                                                               | Drywell CHRMS B                     |        | 380.0 R/Hr                                        |                       | 10 <sup>-1</sup> - 10 <sup>7</sup> |              |
| C170/1001-607                                                                 | Torus CHRMS A                       |        | <u> </u>                                          |                       | 10 <sup>-1</sup> - 10 <sup>7</sup> |              |
|                                                                               | Torus CHRMS B                       |        | 40.0 R/Hr                                         |                       | 10 <sup>-1</sup> - 10 <sup>7</sup> |              |
| FLOW RATES<br>SBGT (CFM)<br>Rx Bldg (CFM)                                     | Panel C7<br><u>4000</u><br>ISOLATED |        |                                                   | Main Stack<br>TB Vent |                                    | CFM*<br>CFM* |
| MET DATA<br>Delta Temp (°F)<br>Outside Temp (°F)<br>Stability Class<br>Precip | *                                   |        | 220<br>Dir (from) <u>112.</u><br>Speed <u>8.0</u> | 0                     | <u>33'</u><br><u>114.0</u> [       | Deg.<br>ЛРН  |
| *Not Available In C                                                           | ontrol Room                         | OOS-Ou | t of Service OSH                                  | I-Off Scale Hi        | DS-Down                            | Scale        |

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Sec.

| PROCES                                                                               | S RADIATION                                   | I MO   | NITOR               | S                    |                       | TIME:                                    | 5:15         |
|--------------------------------------------------------------------------------------|-----------------------------------------------|--------|---------------------|----------------------|-----------------------|------------------------------------------|--------------|
| PANEL/ID NO.                                                                         | MONITOR                                       | TREND  | READING             |                      | ALARM IN              | RANGE                                    |              |
| C910/1705-18                                                                         | Main Stack Lo                                 |        | 8.50E+04 (          | CPS                  | Hi Hi                 | 10 <sup>-1</sup> - 10 <sup>6</sup>       |              |
| C910/1001-608                                                                        | Main Stack Hi                                 |        | DS I                | R/Hr                 |                       | 10 <sup>-1</sup> - 10 <sup>4</sup>       |              |
| C910/1705-32                                                                         | Rx Bldg Vent Lo                               |        | 20.0                | CPS                  |                       | 10 <sup>-1</sup> - 10 <sup>6</sup>       |              |
| C910/1001-609                                                                        | Rx Bldg Vent Hi                               |        | DS I                | R/Hr                 |                       | 10 <sup>-1</sup> - 10 <sup>4</sup>       |              |
| C910/1001-610                                                                        | Turbine Bldg Vent Hi                          |        | DS F                | R/Hr                 |                       | 10 <sup>-1</sup> - 10 <sup>4</sup>       |              |
| C910/1705-2                                                                          | Main Steam Line A                             |        | <u>1.5E+01</u> r    | nR/Hr                |                       | 10 <sup>0</sup> - 10 <sup>6</sup>        |              |
|                                                                                      | Main Steam Line B                             |        | <u>1.8E+01</u> r    | nR/Hr                |                       | 10 <sup>0</sup> - 10 <sup>6</sup>        |              |
|                                                                                      | Main Steam Line C                             |        | <u>1.2E+01</u> r    | nR/Hr                |                       | 10 <sup>0</sup> - 10 <sup>6</sup>        |              |
|                                                                                      | Main Steam Line D                             |        | <u>1.4E+01</u> r    | nR/Hr                |                       | 10 <sup>0</sup> - 10 <sup>6</sup>        |              |
| C910/1705-3                                                                          | Air Ejector Off Gas                           |        | <u> </u>            | nR/Hr                |                       | 10 <sup>0</sup> - 10 <sup>6</sup>        |              |
| C910/1705-4                                                                          | A Loop RBCCW                                  |        | 800.0               | CPS                  |                       | 10 <sup>-1</sup> - 10 <sup>6</sup>       |              |
|                                                                                      | B Loop RBCCW                                  |        | <u> </u>            | CPS                  |                       | 10 <sup>-1</sup> - 10 <sup>6</sup>       |              |
| C910/1705-8                                                                          | <b>Refuel Floor Vent</b>                      |        | <u>5.0</u> n        | nR/Hr                |                       | 10 <sup>-1</sup> - 10 <sup>3</sup>       |              |
| C910/1705-9                                                                          | SBGT Exhaust                                  |        | <u>800.0</u> n      | nR/Hr                | Hi                    | 10 <sup>0</sup> - 10 <sup>4</sup>        |              |
| C910/1705-16                                                                         | Control Rm Air Intake                         |        | <u>0.05</u> n       | nR/Hr                |                       | 10 <sup>-2</sup> - 10 <sup>2</sup>       |              |
| C910/1705-30                                                                         | R/W Discharge                                 |        | 100.0               | CPS                  |                       | 10 <sup>-1</sup> - 10 <sup>6</sup>       |              |
| C910/1705-5                                                                          | Off Gas Post Treatment                        |        | 400.0               | CPS                  |                       | 10 <sup>-1</sup> - 10 <sup>6</sup>       |              |
| C170/1001-606                                                                        | Drywell CHRMS A                               |        | <u> </u>            | R/Hr                 |                       | 10 <sup>-1</sup> - 10 <sup>7</sup>       |              |
|                                                                                      | Drywell CHRMS B                               |        | <u>380.0</u> F      | R/Hr                 |                       | 10 <sup>-1</sup> - 10 <sup>7</sup>       |              |
| C170/1001-607                                                                        | Torus CHRMS A                                 |        | <u> </u>            | ₹/Hr                 |                       | 10 <sup>-1</sup> - 10 <sup>7</sup>       |              |
|                                                                                      | Torus CHRMS B                                 |        | <u> </u>            | ₹/Hr                 |                       | 10 <sup>-1</sup> - 10 <sup>7</sup>       |              |
| FLOW RATES<br>SBGT (CFM)<br>Rx Bldg (CFM)                                            | Panel C7<br><u>4000</u><br>ISOLATED           |        |                     |                      | Main Stack<br>TB Vent |                                          | CFM*<br>CFM* |
| <u>MET DATA</u><br>Delta Temp (°F)<br>Outside Temp (°F)<br>Stability Class<br>Precip | Panel MT1<br><u>-1.30</u><br><u>51.0</u><br>* |        | Dir (from)<br>Speed | 220'<br>112.0<br>8.0 | * <u>160'</u>         | <u>33'</u><br><u>114.0</u><br><u>6.7</u> | Deg.<br>MPH  |
| *Not Available In C                                                                  | ontrol Room                                   | OOS-Ou | t of Service        | OSH-0                | Off Scale Hi          | DS-Dowr                                  | 1 Scale      |

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| PROCES                                                                               | S RADIATION                                   |         | NITOR            | S                           |                       | TIME:                                    | 5:30         |
|--------------------------------------------------------------------------------------|-----------------------------------------------|---------|------------------|-----------------------------|-----------------------|------------------------------------------|--------------|
| PANEL/ID NO.                                                                         | MONITOR                                       | TREND   | READING          |                             | ALARM IN              | RANG                                     |              |
| C910/1705-18                                                                         | Main Stack Lo                                 |         | 7.2E+04          | CPS                         | Hi Hi                 | 10 <sup>-1</sup> - 10                    | 6            |
| C910/1001-608                                                                        | Main Stack Hi                                 |         | DS               | R/Hr                        |                       | 10 <sup>-1</sup> - 10                    | 4            |
| C910/1705-32                                                                         | Rx Bldg Vent Lo                               |         | 20.0             | CPS                         |                       | 10 <sup>-1</sup> - 10                    | 6            |
| C910/1001-609                                                                        | Rx Bldg Vent Hi                               |         | DS               | R/Hr                        |                       | 10 <sup>-1</sup> - 10                    |              |
| C910/1001-610                                                                        | Turbine Bldg Vent Hi                          |         | DS I             | R/Hr                        |                       | 10 <sup>-1</sup> - 10                    | 4            |
| C910/1705-2                                                                          | Main Steam Line A                             |         | <u>1.5E+01</u> r | nR/Hr                       |                       | 10 <sup>0</sup> - 10                     | 6            |
|                                                                                      | Main Steam Line B                             |         | 1.8E+01 r        | nR/Hr                       |                       | 10 <sup>0</sup> - 10                     | 6            |
|                                                                                      | Main Steam Line C                             |         | 1.2E+01 r        | nR/Hr                       |                       | 10 <sup>0</sup> - 10                     | 6            |
|                                                                                      | Main Steam Line D                             |         | 1.4E+01 r        | nR/Hr                       |                       | 10 <sup>0</sup> - 10                     | 6            |
| C910/1705-3                                                                          | Air Ejector Off Gas                           |         | 45.0 r           | nR/Hr                       |                       | 10 <sup>0</sup> - 10                     | 6            |
| C910/1705-4                                                                          | A Loop RBCCW                                  |         | 800.0 0          | CPS                         |                       | 10 <sup>-1</sup> - 10                    | 6            |
|                                                                                      | B Loop RBCCW                                  |         | 1500.0 0         | CPS                         |                       | 10 <sup>-1</sup> - 10                    | 6            |
| C910/1705-8                                                                          | <b>Refuel Floor Vent</b>                      |         | <u>5.0</u> n     | nR/Hr                       |                       | 10 <sup>-1</sup> - 10 <sup>5</sup>       | 3            |
| C910/1705-9                                                                          | SBGT Exhaust                                  |         | <u> </u>         | nR/Hr                       | Hi                    | 10 <sup>0</sup> - 10 <sup>0</sup>        | 1            |
| C910/1705-16                                                                         | Control Rm Air Intake                         |         | 0.1 n            | nR/Hr                       |                       | 10 <sup>-2</sup> - 10 <sup>2</sup>       | 2            |
| C910/1705-30                                                                         | R/W Discharge                                 |         | 100.0 C          | PS                          |                       | 10 <sup>-1</sup> - 10 <sup>6</sup>       | 5            |
| C910/1705-5                                                                          | Off Gas Post Treatment                        |         | 400.0 0          | PS                          |                       | 10 <sup>-1</sup> - 10 <sup>6</sup>       | 5            |
| C170/1001-606                                                                        | Drywell CHRMS A                               |         | <u>1.0</u> R     | ₹/Hr                        |                       | 10 <sup>-1</sup> - 10 <sup>7</sup>       | ,            |
|                                                                                      | Drywell CHRMS B                               |         | 380.0 R          | v/Hr                        |                       | 10 <sup>-1</sup> - 10 <sup>7</sup>       | ,            |
| C170/1001-607                                                                        | Torus CHRMS A                                 |         | 1.0 R            | VHr [                       |                       | 10 <sup>-1</sup> - 10 <sup>7</sup>       |              |
|                                                                                      | Torus CHRMS B                                 |         | 40.0 R           | VHr [                       |                       | <b>10<sup>-1</sup> - 10</b> <sup>7</sup> |              |
| FLOW RATES<br>SBGT (CFM)<br>Rx Bldg (CFM)                                            | Panel C7<br><u>4000</u><br>ISOLATED           |         |                  | -                           | Main Stack<br>TB Vent |                                          | CFM*<br>CFM* |
| <b>MET DATA</b><br>Delta Temp (°F)<br>Outside Temp (°F)<br>Stability Class<br>Precip | Panel MT1<br><u>-1.30</u><br><u>51.0</u><br>* |         |                  | <u>220'</u><br>112.0<br>8.0 | * <u>160'</u>         | <u>33'</u><br><u>114.0</u><br><u>6.7</u> | Deg.<br>MPH  |
| *Not Available In C                                                                  | ontrol Room                                   | OOS-Out | t of Service     | OSH-C                       | off Scale Hi          | DS-Dow                                   | n Scale      |

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| 111 RPV NORMAL                         | ]                 | EFFLU              | ENT RADIATION      |             |              |            |
|----------------------------------------|-------------------|--------------------|--------------------|-------------|--------------|------------|
|                                        |                   | EFFL RAD<br>NORMAL |                    |             |              |            |
| VENT                                   | INSTR NO.         | UNITS              | VENT               | INSTR NO.   | UNITS        |            |
| STACK GAS #1                           | RM-1705-18A       | 15.0 CPS           | RX BLDG EXH VENT A | RM-1705-32A | 20.0 CPS     |            |
| STACK ©AS #2                           | RM-1705-18B       | 15.0 CPS           | RX BLDG EXH VENT B | RM-1705-32B | 20.0 CPS     |            |
| MAIN STACK GAS                         | RT-1001-608       | DS R/HR            | RX BLDG EXH VENT   | RT-1001-609 | DS R/HR      |            |
| REFUEL FLR VENT EXH A                  | RM-1705-8A        | <b>5.0</b> mR/HR   | RADWASTE EFFLUENT  | RM-1705-30  | 100.0 CPS    |            |
| REFUEL FLR VENT EXH B                  | RM-1705-8B        | <b>5.0</b> mR/HR   | TURB BLDG ROOF EXH | RT-1001-610 | DS R/HR      |            |
| REFUEL FLR VENT EXH C                  | RM-1705-8C        | <b>5.0</b> mR/HR   | SBGT DISCHARGE     | RM-1705-9   | 3.0 mR/HR    |            |
| REFUEL FLR VENT EXH D                  | RM-1705-8D        | 5.0 mR/HR          |                    |             |              |            |
| REFUEL FLR VENT EXH                    |                   | NORMAL             |                    |             |              |            |
|                                        |                   |                    |                    | PILGR       | IM           |            |
|                                        |                   |                    |                    |             |              |            |
| 112 RPV NORMAL                         | 7                 | DDOCES             | S DADIATION        | <u> </u>    |              | [          |
| 112 RPV NORMAL                         | ]                 | PROCES             | S RADIATION        |             |              | CNTMT NORI |
|                                        | MSL RAD<br>NORMAL | PROC RAD<br>NORMAL |                    |             |              |            |
| PROCESS                                | INSTR NO.         | mR/HR              | PROCESS            |             | INSTR NO.    | CPS        |
| OFFGAS LOG RAD A                       | RM-1705-3A        | 40.0               | OFFGAS POST-TREATM | ENT A       | RM-1705-5A   | 200.0      |
| OFFGAS LOG RAD B                       | RM-1705-3B        | 40.0               | OFFGAS POST-TREATM | ENT B       | RM-1705-58   | 200.0      |
| CARBON BED VAULT                       | RM-1705-60        | 120.0              |                    |             |              | 050.0      |
| CARBON BED VAUET                       | RW-1705-00        | 120.0              | RBCCW A PROCESS    |             | RM-1705-4A   | 250.0      |
|                                        |                   |                    | RBCCW B PROCESS    |             | RM-1705-4B   | 150.0      |
| MAIN STEAM LINE                        | INSTR NO.         | mR/HR              | (HI RANGE)         |             | INSTR NO.    | R/HR       |
| MAIN STEAM LINE A                      | RM-1705-2A        | 2645.0             | DRYWELL A          |             | RIT1001-606A | 2.5        |
|                                        | RM-1705-2B        | 3400.0             | DRYWELL B          |             | RIT1001-606B | 2.8        |
| MAIN STEAM LINE B                      |                   |                    |                    |             |              |            |
| MAIN STEAM LINE B<br>MAIN STEAM LINE C | RM-1705-2C        | 3050.0             | TORUS A            |             | RIT1001-607A | DS         |

Sec. 1

## SPDS 111/112 Displays

| 111 RPV NORMAL                                                                                                                   | ]                                                                                                      | EFFLU                                                                                   | ENT RADIATION                                                                                                                     |             |                                                                                                   | CNTMT NORMAL                                                          |
|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
|                                                                                                                                  |                                                                                                        | EFFL RAD<br>NORMAL                                                                      |                                                                                                                                   |             |                                                                                                   |                                                                       |
| VENT                                                                                                                             | INSTR NO.                                                                                              | UNITS                                                                                   | VENT                                                                                                                              | INSTR NO.   | UNITS                                                                                             |                                                                       |
| STACK GAS #1                                                                                                                     | RM-1705-18A                                                                                            | 30.0 CPS                                                                                | RX BLDG EXH VENT A                                                                                                                | RM-1705-32A | 40.0 CPS                                                                                          |                                                                       |
| STACK GAS #2                                                                                                                     | RM-1705-18B                                                                                            | 30.0 CPS                                                                                | RX BLDG EXH VENT B                                                                                                                | RM-1705-32B | 40.0 CPS                                                                                          |                                                                       |
| MAIN STACK GAS                                                                                                                   | RT-1001-608                                                                                            | DS R/HR                                                                                 | RX BLDG EXH VENT                                                                                                                  | RT-1001-609 | DS R/HR                                                                                           |                                                                       |
| REFUEL FLR VENT EXH A                                                                                                            | RM-1705-8A                                                                                             | 5.0 mR/HR                                                                               | RADWASTE EFFLUENT                                                                                                                 | RM-1705-30  | 100.0 CPS                                                                                         |                                                                       |
| REFUEL FLR VENT EXH B                                                                                                            | RM-1705-8B                                                                                             | 5.0 mR/HR                                                                               | TURB BLDG ROOF EXH                                                                                                                | RT-1001-610 | DS R/HR                                                                                           |                                                                       |
| REFUEL FLR VENT EXH C                                                                                                            | RM-1705-8C                                                                                             | 5.0 mR/HR                                                                               | SBGT DISCHARGE                                                                                                                    | RM-1705-9   | 3.0 mR/HR                                                                                         | l                                                                     |
| REFUEL FLR VENT EXH D                                                                                                            | RM-1705-8D                                                                                             | 5.0 mR/HR                                                                               |                                                                                                                                   |             |                                                                                                   |                                                                       |
| REFUEL FLR VENT EXH                                                                                                              |                                                                                                        | NORMAL                                                                                  |                                                                                                                                   |             |                                                                                                   |                                                                       |
|                                                                                                                                  |                                                                                                        |                                                                                         |                                                                                                                                   | PILGE       | RIM                                                                                               | 00:10                                                                 |
|                                                                                                                                  |                                                                                                        |                                                                                         |                                                                                                                                   |             |                                                                                                   |                                                                       |
|                                                                                                                                  |                                                                                                        |                                                                                         |                                                                                                                                   |             |                                                                                                   |                                                                       |
| 112 RPV NORMAL                                                                                                                   | ]                                                                                                      | PROCES                                                                                  | S RADIATION                                                                                                                       |             |                                                                                                   |                                                                       |
| 112 RPV NORMAL                                                                                                                   | MSL RAD<br>NORMAL                                                                                      | PROCES                                                                                  | S RADIATION                                                                                                                       |             |                                                                                                   | CNTMT NORMAL                                                          |
| 112 RPV NORMAL                                                                                                                   |                                                                                                        | PROC RAD                                                                                | S RADIATION                                                                                                                       |             | INSTR NO.                                                                                         | CNTMT NORMAL                                                          |
|                                                                                                                                  | NORMAL                                                                                                 | PROC RAD<br>NORMAL                                                                      |                                                                                                                                   | ENT A       | <u>INSTR NO.</u><br>RM-1705-5A                                                                    |                                                                       |
| PROCESS<br>OFFGAS LOG RAD A                                                                                                      | NORMAL                                                                                                 | PROC RAD<br>NORMAL<br>mR/HR                                                             | PROCESS                                                                                                                           |             |                                                                                                   | CPS                                                                   |
| PROCESS<br>OFFGAS LOG RAD A<br>OFFGAS LOG RAD B                                                                                  | NORMAL<br>INSTR NO.<br>RM-1705-3A                                                                      | PROC RAD<br>NORMAL<br>mR/HR<br>30000.0                                                  | PROCESS<br>OFFGAS POST-TREATM                                                                                                     |             | RM-1705-5A<br>RM-1705-5B                                                                          | 45000.0<br>45000.0                                                    |
| PROCESS                                                                                                                          | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B                                                        | PROC RAD<br>NORMAL<br>mR/HR<br>30000.0                                                  | PROCESS<br>OFFGAS POST-TREATM<br>OFFGAS POST-TREATM                                                                               |             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A                                                            | CPS<br>45000.0<br>45000.0<br>15000.0                                  |
| PROCESS<br>OFFGAS LOG RAD A<br>OFFGAS LOG RAD B                                                                                  | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B                                                        | PROC RAD<br>NORMAL<br>mR/HR<br>30000.0                                                  | PROCESS<br>OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS                                                            |             | RM-1705-5A<br>RM-1705-5B                                                                          | CPS<br>45000.0<br>45000.0                                             |
| PROCESS<br>OFFGAS LOG RAD A<br>OFFGAS LOG RAD B<br>CARBON BED VAULT                                                              | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B                                                        | PROC RAD<br>NORMAL<br>mR/HR<br>30000.0                                                  | PROCESS<br>OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS                                                            |             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A                                                            | CPS<br>45000.0<br>45000.0<br>15000.0                                  |
| PROCESS<br>OFFGAS LOG RAD A<br>OFFGAS LOG RAD B<br>CARBON BED VAULT<br>MAIN STEAM LINE                                           | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B                                                        | PROC RAD<br>NORMAL<br>30000.0<br>30000.0                                                | PROCESS<br>OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS<br>RBCCW B PROCESS                                         |             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A<br>RM-1705-4B                                              | CPS<br>45000.0<br>45000.0<br>15000.0<br>18000.0                       |
| PROCESS<br>OFFGAS LOG RAD A<br>OFFGAS LOG RAD B                                                                                  | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B<br>RM-1705-60<br>INSTR NO.                             | PROC RAD<br>NORMAL<br>30000.0<br>30000.0<br>120.0                                       | PROCESS<br>OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS<br>RBCCW B PROCESS<br>(HI RANGE)                           |             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A<br>RM-1705-4B<br>INSTR NO.                                 | CPS<br>45000.0<br>45000.0<br>15000.0<br>18000.0<br>R/HR               |
| PROCESS<br>OFFGAS LOG RAD A<br>OFFGAS LOG RAD B<br>CARBON BED VAULT<br>MAIN STEAM LINE<br>MAIN STEAM LINE A                      | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B<br>RM-1705-60<br>INSTR NO.<br>RM-1705-2A               | PROC RAD<br>NORMAL<br>mR/HR<br>30000.0<br>30000.0<br>120.0<br>mR/HR<br>33000.0          | PROCESS<br>OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS<br>RBCCW B PROCESS<br>(HI RANGE)<br>DRYWELL A              |             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A<br>RM-1705-4B<br>INSTR NO.<br>RIT1001-606A                 | CPS<br>45000.0<br>45000.0<br>15000.0<br>18000.0<br>R/HR<br>1.2        |
| PROCESS<br>OFFGAS LOG RAD A<br>OFFGAS LOG RAD B<br>CARBON BED VAULT<br>MAIN STEAM LINE<br>MAIN STEAM LINE A<br>MAIN STEAM LINE B | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B<br>RM-1705-60<br>INSTR NO.<br>RM-1705-2A<br>RM-1705-2B | PROC RAD<br>NORMAL<br>mR/HR<br>30000.0<br>120.0<br>120.0<br>mR/HR<br>33000.0<br>42000.0 | PROCESS<br>OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS<br>RBCCW B PROCESS<br>(HI RANGE)<br>DRYWELL A<br>DRYWELL B |             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A<br>RM-1705-4B<br>INSTR NO.<br>RIT1001-606A<br>RIT1001-606B | CPS<br>45000.0<br>45000.0<br>15000.0<br>18000.0<br>R/HR<br>1.2<br>1.2 |

| 111 RPV NORMAL        | ]           | EFFLU              | IENT RADIATION     |             |              | CNTMT NORMAL |
|-----------------------|-------------|--------------------|--------------------|-------------|--------------|--------------|
|                       |             | EFFL RAD<br>NORMAL |                    |             |              |              |
| VENT                  | INSTR NO.   | UNITS              | VENT               | INSTR NO.   | UNITS        |              |
| STACK GAS #1          | RM-1705-18A | 4500.0 CPS         | RX BLDG EXH VENT A | RM-1705-32A | 30.0 CPS     |              |
| STACK GAS #2          | RM-1705-18B | 4500.0 CPS         | RX BLDG EXH VENT B | RM-1705-32B | 30.0 CPS     |              |
| MAIN STACK GAS        | RT-1001-608 | DS R/HR            | RX BLDG EXH VENT   | RT-1001-609 | DS R/HR      |              |
| REFUEL FLR VENT EXH A | RM-1705-8A  | 5.0 mR/HR          | RADWASTE EFFLUENT  | RM-1705-30  | 100.0 CPS    |              |
| REFUEL FLR VENT EXH B | RM-1705-8B  | 5.0 mR/HR          | TURB BLDG ROOF EXH | RT-1001-610 | DS R/HR      |              |
| REFUEL FLR VENT EXH C | RM-1705-8C  | <b>5.0</b> mR/HR   | SBGT DISCHARGE     | RM-1705-9   | 8.0 mR/HR    |              |
| REFUEL FLR VENT EXH D | RM-1705-8D  | 5.0 mR/HR          |                    |             |              |              |
| REFUEL FLR VENT EXH   |             | NORMAL             |                    |             |              |              |
|                       |             |                    |                    | PILGR       | IM           | 0:15         |
|                       |             |                    |                    |             |              |              |
| 112 RPV NORMAL        | ]           | PROCES             | S RADIATION        |             |              | CNTMT NORMAL |
|                       | MSL RAD     | PROC RAD           |                    |             |              |              |
|                       | NORMAL      | NORMAL             |                    |             |              |              |
| PROCESS               | INSTR NO.   | mR/HR              | PROCESS            |             | INSTR NO.    | CPS          |
| OFFGAS LOG RAD A      | RM-1705-3A  | 24000.0            | OFFGAS POST-TREATM | ENT A       | RM-1705-5A   | 130000.0     |
| OFFGAS LOG RAD B      | RM-1705-3B  | 24000.0            | OFFGAS POST-TREATM | ENT B       | RM-1705-5B   | 130000.0     |
|                       |             |                    |                    |             |              |              |
| CARBON BED VAULT      | RM-1705-60  | 120.0              | RBCCW A PROCESS    |             | RM-1705-4A   | 12000.0      |
|                       |             |                    | RBCCW B PROCESS    |             | RM-1705-4B   | 16000.0      |
|                       |             |                    |                    |             |              |              |
| MAIN STEAM LINE       | INSTR NO.   | mR/HR              | (HI RANGE)         |             | INSTR NO.    | R/HR         |
| MAIN STEAM LINE A     | RM-1705-2A  | 28000.0            | DRYWELL A          |             | RIT1001-606A | 1.0          |
| MAIN STEAM LINE B     | RM-1705-2B  | 40000.0            | DRYWELL B          |             | RIT1001-606B | 5.0          |
| MAIN STEAM LINE C     | RM-1705-2C  | 40000.0            | TORUS A            |             | RIT1001-607A | 1.0          |
| MAIN STEAM LINE D     | RM-1705-2D  | 28000.0            | TORUS B            |             | RIT1001-607B | 2.0          |
|                       |             |                    |                    |             |              |              |
|                       |             |                    |                    | PILGR       | IM           | 0:15         |

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0:15

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| 111 RPV NORMAL                                                                                   | ]                                                                 | EFFL RAD                                        | IENT RADIATION                                                                                              |             |                                                                                   | CNTMT NOR                                               |
|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------|---------------------------------------------------------|
| VENT                                                                                             | INSTR NO.                                                         |                                                 | VENT                                                                                                        | INSTR NO.   | UNITS                                                                             |                                                         |
| STACK GAS #1                                                                                     | RM-1705-18A                                                       | 1200.0 CPS                                      | RX BLDG EXH VENT A                                                                                          | RM-1705-32A | 25.0 CPS                                                                          |                                                         |
| STACK GAS #2                                                                                     | RM-1705-18B                                                       | 1200.0 CPS                                      | RX BLDG EXH VENT B                                                                                          | RM-1705-32B | 25.0 CPS                                                                          |                                                         |
| MAIN STACK GAS                                                                                   | RT-1001-608                                                       | DS R/HR                                         | RX BLDG EXH VENT                                                                                            | RT-1001-609 | DS R/HR                                                                           |                                                         |
| REFUEL FLR VENT EXH A                                                                            | RM-1705-8A                                                        | 5.0 mR/HR                                       | RADWASTE EFFLUENT                                                                                           | RM-1705-30  | 100.0 CPS                                                                         |                                                         |
| REFUEL FLR VENT EXH B                                                                            | RM-1705-8B                                                        | 5.0 mR/HR                                       | TURB BLDG ROOF EXH                                                                                          | RT-1001-610 | DS R/HR                                                                           |                                                         |
| REFUEL FLR VENT EXH C                                                                            | RM-1705-8C                                                        | 5.0 mR/HR                                       | SBGT DISCHARGE                                                                                              | RM-1705-9   | 3.0 mR/HR                                                                         |                                                         |
| REFUEL FLR VENT EXH D                                                                            | RM-1705-8D                                                        | 5.0 mR/HR                                       |                                                                                                             |             |                                                                                   |                                                         |
| REFUEL FLR VENT EXH                                                                              |                                                                   | NORMAL                                          |                                                                                                             |             |                                                                                   |                                                         |
|                                                                                                  |                                                                   |                                                 |                                                                                                             | PILGF       | RIM                                                                               |                                                         |
|                                                                                                  |                                                                   |                                                 |                                                                                                             |             |                                                                                   |                                                         |
| 112 RPV NORMAL                                                                                   | ]                                                                 | PROCES                                          | S RADIATION                                                                                                 |             |                                                                                   | CNTMT NOR                                               |
|                                                                                                  | MSL RAD<br>NORMAL                                                 | PROC RAD<br>NORMAL                              |                                                                                                             |             |                                                                                   |                                                         |
|                                                                                                  |                                                                   |                                                 |                                                                                                             |             |                                                                                   |                                                         |
| PROCESS                                                                                          | INSTR NO.                                                         | mR/HR                                           | PROCESS                                                                                                     |             | INSTR NO.                                                                         | CPS                                                     |
| PROCESS<br>OFFGAS LOG RAD A                                                                      | INSTR NO.<br>RM-1705-3A                                           | mR/HR                                           | PROCESS<br>OFFGAS POST-TREATM                                                                               | ENT A       | INSTR NO.<br>RM-1705-5A                                                           | r                                                       |
|                                                                                                  |                                                                   | ······                                          |                                                                                                             |             |                                                                                   | CPS<br>68500.0<br>68500.0                               |
| OFFGAS LOG RAD A<br>OFFGAS LOG RAD B                                                             | RM-1705-3A<br>RM-1705-3B                                          | 12000.0<br>12000.0                              | OFFGAS POST-TREATM                                                                                          |             | RM-1705-5A<br>RM-1705-5B                                                          | 68500.0<br>68500.0                                      |
| OFFGAS LOG RAD A                                                                                 | RM-1705-3A                                                        | 12000.0                                         | OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS                                                 |             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A                                            | 68500.0<br>68500.0                                      |
| OFFGAS LOG RAD A<br>OFFGAS LOG RAD B                                                             | RM-1705-3A<br>RM-1705-3B                                          | 12000.0<br>12000.0                              | OFFGAS POST-TREATM                                                                                          |             | RM-1705-5A<br>RM-1705-5B                                                          | 68500.0<br>68500.0                                      |
| OFFGAS LOG RAD A<br>OFFGAS LOG RAD B                                                             | RM-1705-3A<br>RM-1705-3B                                          | 12000.0<br>12000.0                              | OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS                                                 |             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A                                            | 68500.0<br>68500.0                                      |
| OFFGAS LOG RAD A<br>OFFGAS LOG RAD B<br>CARBON BED VAULT                                         | RM-1705-3A<br>RM-1705-3B<br>RM-1705-60                            | 12000.0<br>12000.0<br>115.0                     | OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS<br>RBCCW B PROCESS                              |             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A<br>RM-1705-4B                              | 68500.0<br>68500.0<br>11000.0                           |
| OFFGAS LOG RAD A<br>OFFGAS LOG RAD B<br>CARBON BED VAULT<br>MAIN STEAM LINE                      | RM-1705-3A<br>RM-1705-3B<br>RM-1705-60<br>INSTR NO.               | 12000.0<br>12000.0<br>115.0<br>mR/HR            | OFFGAS POST-TREATMI<br>OFFGAS POST-TREATMI<br>RBCCW A PROCESS<br>RBCCW B PROCESS<br>(HI RANGE)              |             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A<br>RM-1705-4B<br>INSTR NO.                 | 68500.0<br>68500.0<br>11000.0<br>15000.0<br>R/HR        |
| OFFGAS LOG RAD A<br>OFFGAS LOG RAD B<br>CARBON BED VAULT<br>MAIN STEAM LINE<br>MAIN STEAM LINE A | RM-1705-3A<br>RM-1705-3B<br>RM-1705-60<br>INSTR NO.<br>RM-1705-2A | 12000.0<br>12000.0<br>115.0<br>mR/HR<br>12700.0 | OFFGAS POST-TREATMI<br>OFFGAS POST-TREATMI<br>RBCCW A PROCESS<br>RBCCW B PROCESS<br>(HI RANGE)<br>DRYWELL A |             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A<br>RM-1705-4B<br>INSTR NO.<br>RIT1001-606A | 68500.0<br>68500.0<br>11000.0<br>15000.0<br>R/HR<br>1.0 |

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| 111 RPV NORMAL                                                                                      | ]                                                   | EFF                                     | LUENT RADIATION                                                                                  |               |                                                                                     | CNTMT NOR                                          |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------|---------------|-------------------------------------------------------------------------------------|----------------------------------------------------|
|                                                                                                     |                                                     | EFFL RAD<br>NORMAL                      |                                                                                                  |               |                                                                                     |                                                    |
| VENT                                                                                                | INSTR NO.                                           | UNITS                                   | VENT                                                                                             | INSTR NO.     | UNITS                                                                               |                                                    |
| STACK GAS #1                                                                                        | RM-1705-18A                                         | 20.0 CPS                                | RX BLDG EXH VENT A                                                                               | RM-1705-32A   | 20.0 CPS                                                                            |                                                    |
| STACK GAS #2                                                                                        | RM-1705-18B                                         | 20.0 CPS                                | RX BLDG EXH VENT B                                                                               | RM-1705-32B   | 20.0 CPS                                                                            |                                                    |
| MAIN STACK GAS                                                                                      | RT-1001-608                                         | DS R/H                                  | R RX BLDG EXH VENT                                                                               | RT-1001-609   | DS R/HR                                                                             |                                                    |
| REFUEL FLR VENT EXH A                                                                               | RM-1705-8A                                          | 5.0 mR/                                 | HR RADWASTE EFFLUENT                                                                             | RM-1705-30    | 100.0 CPS                                                                           |                                                    |
| REFUEL FLR VENT EXH B                                                                               | RM-1705-8B                                          | 5.0 mR/                                 | HR TURB BLDG ROOF EXH                                                                            | I RT-1001-610 | DS R/HR                                                                             |                                                    |
| REFUEL FLR VENT EXH C                                                                               | RM-1705-8C                                          | 5.0 mR/                                 | HR SBGT DISCHARGE                                                                                | RM-1705-9     | 3.0 mR/HR                                                                           |                                                    |
| REFUEL FLR VENT EXH D                                                                               | RM-1705-8D                                          | 5.0 mR/                                 | HR                                                                                               |               |                                                                                     |                                                    |
| REFUEL FLR VENT EXH                                                                                 |                                                     | NORMAL                                  |                                                                                                  |               |                                                                                     |                                                    |
|                                                                                                     |                                                     |                                         |                                                                                                  | PILG          | RIM                                                                                 |                                                    |
|                                                                                                     |                                                     |                                         |                                                                                                  |               |                                                                                     |                                                    |
| 112 RPV NORMAL                                                                                      | ]                                                   | PROC                                    | ESS RADIATION                                                                                    |               |                                                                                     |                                                    |
|                                                                                                     | MSL RAD<br>NORMAL                                   | PROC RAD<br>NORMAL                      |                                                                                                  |               |                                                                                     |                                                    |
| PROCESS                                                                                             | INSTR NO.                                           | mR/HR                                   | PROCESS                                                                                          |               | INSTR NO.                                                                           | CPS                                                |
| OFFGAS LOG RAD A                                                                                    | RM-1705-3A                                          | 50.0                                    | OFFGAS POST-TREATM                                                                               |               |                                                                                     |                                                    |
|                                                                                                     |                                                     |                                         |                                                                                                  |               | RM-1705-5A                                                                          | 400.0                                              |
| DFFGAS LOG RAD B                                                                                    | RM-1705-3B                                          | 50.0                                    | OFFGAS POST-TREATM                                                                               |               | RM-1705-5A<br>RM-1705-5B                                                            | 400.0                                              |
|                                                                                                     |                                                     | 50.0                                    | OFFGAS POST-TREATN                                                                               |               | RM-1705-5B                                                                          | 400.0                                              |
|                                                                                                     | RM-1705-3B<br>RM-1705-60                            |                                         | OFFGAS POST-TREATN<br>RBCCW A PROCESS                                                            |               | RM-1705-5B<br>RM-1705-4A                                                            | 400.0                                              |
|                                                                                                     |                                                     | 50.0                                    | OFFGAS POST-TREATN                                                                               |               | RM-1705-5B                                                                          | 400.0                                              |
| CARBON BED VAULT                                                                                    |                                                     | 50.0                                    | OFFGAS POST-TREATN<br>RBCCW A PROCESS                                                            |               | RM-1705-5B<br>RM-1705-4A                                                            | 400.0                                              |
| CARBON BED VAULT<br>MAIN STEAM LINE                                                                 | RM-1705-60                                          | 50.0                                    | OFFGAS POST-TREATN<br>RBCCW A PROCESS<br>RBCCW B PROCESS                                         |               | RM-1705-5B<br>RM-1705-4A<br>RM-1705-4B                                              | 400.0<br>10000.0<br>14700.0                        |
| CARBON BED VAULT<br>MAIN STEAM LINE<br>MAIN STEAM LINE A                                            | RM-1705-60<br>INSTR NO.                             | 50.0<br>115.0<br>mR/HR                  | OFFGAS POST-TREATN<br>RBCCW A PROCESS<br>RBCCW B PROCESS<br>(HI RANGE)                           |               | RM-1705-5B<br>RM-1705-4A<br>RM-1705-4B<br>INSTR NO.                                 | 400.0<br>10000.0<br>14700.0<br>R/HR                |
| CARBON BED VAULT<br>MAIN STEAM LINE<br>MAIN STEAM LINE A<br>MAIN STEAM LINE B                       | RM-1705-60<br>INSTR NO.<br>RM-1705-2A               | 50.0<br>115.0<br>mR/HR<br>95.0          | OFFGAS POST-TREATM<br>RBCCW A PROCESS<br>RBCCW B PROCESS<br>(HI RANGE)<br>DRYWELL A              |               | RM-1705-5B<br>RM-1705-4A<br>RM-1705-4B<br>INSTR NO.<br>RIT1001-606A                 | 400.0<br>10000.0<br>14700.0<br>R/HR<br>1.0         |
| DFFGAS LOG RAD B<br>CARBON BED VAULT<br>MAIN STEAM LINE A<br>MAIN STEAM LINE B<br>MAIN STEAM LINE D | RM-1705-60<br>INSTR NO.<br>RM-1705-2A<br>RM-1705-2B | 50.0<br>115.0<br>mR/HR<br>95.0<br>125.0 | OFFGAS POST-TREATM<br>RBCCW A PROCESS<br>RBCCW B PROCESS<br>(HI RANGE)<br>DRYWELL A<br>DRYWELL B |               | RM-1705-5B<br>RM-1705-4A<br>RM-1705-4B<br>INSTR NO.<br>RIT1001-606A<br>RIT1001-606B | 400.0<br>10000.0<br>14700.0<br>R/HR<br>1.0<br>30.0 |

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# SPDS 111/112 Displays

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| 111 RPV NORMAL        | ]                 | EFFLU              | ENT RADIATION      |             |              | CNTMT NORMAL |
|-----------------------|-------------------|--------------------|--------------------|-------------|--------------|--------------|
|                       |                   | EFFL RAD<br>NORMAL |                    |             |              |              |
| VENT                  | INSTR NO.         | UNITS              | VENT               | INSTR NO.   | UNITS        |              |
| STACK GAS #1          | RM-1705-18A       | 20.0 CPS           | RX BLDG EXH VENT A | RM-1705-32A | 20.0 CPS     |              |
| STACK GAS #2          | RM-1705-18B       | 20.0 CPS           | RX BLDG EXH VENT B | RM-1705-32B | 20 CPS       |              |
| MAIN STACK GAS        | RT-1001-608       | DS R/HR            | RX BLDG EXH VENT   | RT-1001-609 | DS R/HR      |              |
| REFUEL FLR VENT EXH A | RM-1705-8A        | 5.0 mR/HR          | RADWASTE EFFLUENT  | RM-1705-30  | 100.0 CPS    |              |
| REFUEL FLR VENT EXH B | RM-1705-8B        | 5.0 mR/HR          | TURB BLDG ROOF EXH | RT-1001-610 | DS R/HR      |              |
| REFUEL FLR VENT EXH C | RM-1705-8C        | 5.0 mR/HR          | SBGT DISCHARGE     | RM-1705-9   | 3.0 mR/HR    | L            |
| REFUEL FLR VENT EXH D | RM-1705-8D        | 5.0 mR/HR          |                    |             |              |              |
| REFUEL FLR VENT EXH   |                   | NORMAL             |                    |             |              |              |
|                       |                   |                    |                    | PILGF       | RIM          | 1:00         |
|                       |                   |                    |                    |             |              |              |
| 112 RPV NORMAL        | ]                 | PROCES             | S RADIATION        |             |              | CNTMT NORMAL |
|                       | MSL RAD<br>NORMAL | PROC RAD<br>NORMAL |                    |             |              |              |
| PROCESS               | INSTR NO.         | mR/HR              | PROCESS            |             | INSTR NO.    | CPS          |
| OFFGAS LOG RAD A      | RM-1705-3A        | 45.0               | OFFGAS POST-TREATM | ENT A       | RM-1705-5A   | 400.0        |
| OFFGAS LOG RAD B      | RM-1705-3B        | 45.0               | OFFGAS POST-TREATM | ENT B       | RM-1705-5B   | 400.0        |
|                       |                   |                    |                    |             |              |              |
| CARBON BED VAULT      | RM-1705-60        | 115.0              | RBCCW A PROCESS    |             | RM-1705-4A   | 9900.0       |
|                       |                   |                    | RBCCW B PROCESS    |             | RM-1705-4B   | 13500.0      |
|                       |                   |                    |                    |             |              |              |
| MAIN STEAM LINE       | INSTR NO.         | mR/HR              | (HI RANGE)         |             | INSTR NO.    | R/HR         |
| MAIN STEAM LINE A     | RM-1705-2A        | 15.0               | DRYWELL A          |             | RIT1001-606A | 1.0          |
| MAIN STEAM LINE B     | RM-1705-2B        | 18.0               | DRYWELL B          |             | RIT1001-606B | 90.0         |
| MAIN STEAM LINE C     | RM-1705-2C        | 12.0               | TORUS A            |             | RIT1001-607A | 1.0          |
| MAIN STEAM LINE D     | RM-1705-2D        | 14.0               | TORUS B            |             | RIT1001-607B | 9.0          |
|                       |                   |                    |                    |             |              |              |
|                       |                   |                    |                    | PILGR       | lim          | 1:00         |

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# SPDS 111/112 Displays

|                                        |                          | EFFLU              | JENT RADIATION      |             |                              | CNTMT NO           |
|----------------------------------------|--------------------------|--------------------|---------------------|-------------|------------------------------|--------------------|
|                                        |                          | EFFL RAD<br>NORMAL |                     |             |                              |                    |
| VENT                                   | INSTR NO.                | UNITS              | VENT                | INSTR NO.   | UNITS                        |                    |
| STACK GAS #1                           | RM-1705-18A              | 20.0 CPS           | RX BLDG EXH VENT A  | RM-1705-32A | 20.0 CPS                     |                    |
| STACK GAS #2                           | RM-1705-18B              | 20.0 CPS           | RX BLDG EXH VENT B  | RM-1705-32B | 20.0 CPS                     |                    |
| MAIN STACK GAS                         | RT-1001-608              | DS R/HR            | RX BLDG EXH VENT    | RT-1001-609 | DS R/HR                      |                    |
| REFUEL FLR VENT EXH A                  | RM-1705-8A               | 5.0 mR/HR          | RADWASTE EFFLUENT   | RM-1705-30  | 100.0 CPS                    |                    |
| REFUEL FLR VENT EXH B                  | RM-1705-8B               | 5.0 mR/HR          | TURB BLDG ROOF EXH  | RT-1001-610 | DS R/HR                      |                    |
| REFUEL FLR VENT EXH C                  | RM-1705-8C               | 5.0 mR/HR          | SBGT DISCHARGE      | RM-1705-9   | 3.0 mR/HR                    | 1                  |
| REFUEL FLR VENT EXH D                  | RM-1705-8D               | 5.0 mR/HR          |                     |             |                              |                    |
| REFUEL FLR VENT EXH                    |                          | NORMAL             |                     |             |                              |                    |
|                                        |                          |                    |                     | PILGF       | RIM                          |                    |
|                                        |                          |                    |                     |             |                              |                    |
|                                        | MSL RAD<br>NORMAL        | PROC RAD<br>NORMAL |                     |             |                              | CNTMT NOR          |
| PROCESS                                | INSTR NO.                | mR/HR              | PROCESS             |             | INSTR NO.                    | CPS                |
| OFFGAS LOG RAD A                       | RM-1705-3A               | 45.0               | OFFGAS POST-TREATME | ENT A       | RM-1705-5A                   | 400.0              |
| OFFGAS LOG RAD B                       | RM-1705-3B               | 45.0               | OFFGAS POST-TREATM  | ENT B       | RM-1705-5B                   | 400.0              |
| CARBON BED VAULT                       | RM-1705-60               | 115.0              | RBCCW A PROCESS     |             | RM-1705-4A                   | 9000.0             |
|                                        |                          |                    | RBCCW B PROCESS     |             | RM-1705-4B                   | 12000.0            |
|                                        |                          |                    |                     |             |                              | • <u>•••</u> ••••• |
| MAIN STEAM LINE                        | INSTR NO.                | mR/HR              | (HI RANGE)          |             | INSTR NO.                    | R/HR               |
| MAIN STEAM LINE A                      | RM-1705-2A               | 15.0               | DRYWELL A           |             | RIT1001-606A                 | 1.0                |
|                                        | RM-1705-2B               | 18.0               | DRYWELL B           |             | RIT1001-606B                 | 120.0              |
| MAIN STEAM LINE B                      |                          |                    |                     |             |                              |                    |
| MAIN STEAM LINE B<br>MAIN STEAM LINE C | RM-1705-2C               | 12.0               | TORUS A             |             | RIT1001-607A                 | 1.0                |
|                                        | RM-1705-2C<br>RM-1705-2D | 12.0<br>14.0       | TORUS A<br>TORUS B  |             | RIT1001-607A<br>RIT1001-607B | 1.0<br>10.0        |

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# SPDS 111/112 Displays

| 111 RPV NORMAL        | ]                 | EFF                | LUENT RADIATION      |                      | CNTMT NORMAL |
|-----------------------|-------------------|--------------------|----------------------|----------------------|--------------|
|                       |                   | EFFL RAD<br>NORMAL |                      |                      |              |
| VENT                  | INSTR NO.         | UNITS              | VENT                 | INSTR NO. UNITS      |              |
| STACK GAS #1          | RM-1705-18A       | 20.0 CPS           | RX BLDG EXH VENT A   | RM-1705-32A 20.0 CPS |              |
| STACK GAS #2          | RM-1705-18B       | 20.0 CPS           | RX BLDG EXH VENT B   | RM-1705-32B 20.0 CPS |              |
| MAIN STACK GAS        | RT-1001-608       | DS R/HF            | RX BLDG EXH VENT     | RT-1001-609 DS R/HF  | २            |
| REFUEL FLR VENT EXH A | RM-1705-8A        | 5.0 mR/l           | R RADWASTE EFFLUENT  | RM-1705-30 100.0 CPS |              |
| REFUEL FLR VENT EXH B | RM-1705-8B        | 5.0 mR/l           | R TURB BLDG ROOF EXH | RT-1001-610 DS R/H   | र            |
| REFUEL FLR VENT EXH C | RM-1705-8C        | 5.0 mR/            | R SBGT DISCHARGE     | RM-1705-9 3.0 mR/    | HR           |
| REFUEL FLR VENT EXH D | RM-1705-8D        | 5.0 mR/i           | IR                   |                      |              |
| REFUEL FLR VENT EXH   |                   | NORMAL             |                      |                      |              |
|                       |                   |                    |                      | PILGRIM              | 1:30         |
|                       |                   |                    |                      |                      |              |
| 112 RPV NORMAL        | ]                 | PROC               | ESS RADIATION        |                      | CNTMT NORMAL |
|                       | MSL RAD<br>NORMAL | PROC RAD<br>NORMAL |                      |                      |              |
| PROCESS               | INSTR NO.         | mR/HR              | PROCESS              | INSTR NO.            | CPS          |
| OFFGAS LOG RAD A      | RM-1705-3A        | 45.0               | OFFGAS POST-TREATM   | IENT A RM-1705-5A    | 400.0        |
| OFFGAS LOG RAD B      | RM-1705-3B        | 45.0               | OFFGAS POST-TREATM   | IENT B RM-1705-5B    | 400.0        |
| CARBON BED VAULT      | RM-1705-60        | 115.0              | RBCCW A PROCESS      | RM-1705-4A           | 8200.0       |
|                       |                   |                    | RBCCW B PROCESS      | RM-1705-4B           | 10000.0      |
|                       |                   |                    |                      |                      | 10000.0      |
| MAIN STEAM LINE       | INSTR NO.         | mR/HR              | (HI RANGE)           | INSTR NO.            | R/HR         |
| MAIN STEAM LINE A     | RM-1705-2A        | 15.0               | DRYWELL A            | RIT1001-606A         | 1.0          |
| MAIN STEAM LINE B     | RM-1705-2B        | 18.0               | DRYWELL B            | RIT1001-606B         | 150.0        |
| MAIN STEAM LINE C     | RM-1705-2C        | 12.0               | TORUS A              | RIT1001-607A         | 1.0          |
|                       |                   |                    |                      |                      |              |
| MAIN STEAM LINE D     | RM-1705-2D        | 14.0               | TORUS B              | RIT1001-607B         | 15.0         |

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# SPDS 111/112 Displays

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| 111 RPV NORMAL                                                     |                                                                                                        | EFFLU                                                                                                                          | ENT RADIATION                                                                                                                     |             |                                                                                                   | CNTMT NORMA                                                |
|--------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------|
|                                                                    |                                                                                                        | EFFL RAD<br>NORMAL                                                                                                             |                                                                                                                                   |             |                                                                                                   |                                                            |
| /ENT                                                               | INSTR NO.                                                                                              | UNITS                                                                                                                          | VENT                                                                                                                              | INSTR NO.   | UNITS                                                                                             |                                                            |
| STACK GAS #1                                                       | RM-1705-18A                                                                                            | 20.0 CPS                                                                                                                       | RX BLDG EXH VENT A                                                                                                                | RM-1705-32A | 20.0 CPS                                                                                          |                                                            |
| STACK GAS #2                                                       | RM-1705-18B                                                                                            | 20.0 CPS                                                                                                                       | RX BLDG EXH VENT B                                                                                                                | RM-1705-32B | 20.0 CPS                                                                                          |                                                            |
| IAIN STACK GAS                                                     | RT-1001-608                                                                                            | DS R/HR                                                                                                                        | RX BLDG EXH VENT                                                                                                                  | RT-1001-609 | DS R/HR                                                                                           |                                                            |
| REFUEL FLR VENT EXH A                                              | RM-1705-8A                                                                                             | 5.0 mR/HR                                                                                                                      | RADWASTE EFFLUENT                                                                                                                 | RM-1705-30  | 100.0 CPS                                                                                         |                                                            |
| REFUEL FLR VENT EXH B                                              | RM-1705-8B                                                                                             | 5.0 mR/HR                                                                                                                      | TURB BLDG ROOF EXH                                                                                                                | RT-1001-610 | DS R/HR                                                                                           |                                                            |
| REFUEL FLR VENT EXH C                                              | RM-1705-8C                                                                                             | 5.0 mR/HR                                                                                                                      | SBGT DISCHARGE                                                                                                                    | RM-1705-9   | 3.0 mR/HR                                                                                         | L                                                          |
| REFUEL FLR VENT EXH D                                              | RM-1705-8D                                                                                             | 5.0 mR/HR                                                                                                                      |                                                                                                                                   |             |                                                                                                   |                                                            |
| REFUEL FLR VENT EXH                                                |                                                                                                        | NORMAL                                                                                                                         |                                                                                                                                   |             |                                                                                                   |                                                            |
|                                                                    |                                                                                                        |                                                                                                                                |                                                                                                                                   | PILGR       | IM                                                                                                | 1:                                                         |
|                                                                    |                                                                                                        |                                                                                                                                |                                                                                                                                   |             |                                                                                                   |                                                            |
|                                                                    | -                                                                                                      |                                                                                                                                |                                                                                                                                   |             |                                                                                                   |                                                            |
| 112 RPV NORMAL                                                     | MSL RAD<br>NORMAL                                                                                      | PROCES                                                                                                                         | S RADIATION                                                                                                                       |             |                                                                                                   |                                                            |
| 112 RPV NORMAL                                                     | 1                                                                                                      | PROC RAD                                                                                                                       | S RADIATION                                                                                                                       |             | INSTR NO.                                                                                         |                                                            |
| ROCESS                                                             | NORMAL                                                                                                 | PROC RAD<br>NORMAL                                                                                                             |                                                                                                                                   | ENT A       | INSTR NO.<br>RM-1705-5A                                                                           |                                                            |
| ROCESS                                                             | NORMAL                                                                                                 | PROC RAD<br>NORMAL<br>mR/HR                                                                                                    | PROCESS                                                                                                                           |             |                                                                                                   | CPS                                                        |
| L                                                                  | NORMAL<br>INSTR NO.<br>RM-1705-3A                                                                      | PROC RAD<br>NORMAL<br>mR/HR<br>45.0                                                                                            | PROCESS<br>OFFGAS POST-TREATM                                                                                                     |             | RM-1705-5A<br>RM-1705-5B                                                                          | CPS<br>400.0<br>400.0                                      |
| ROCESS<br>FFGAS LOG RAD A<br>FFGAS LOG RAD B                       | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B                                                        | PROC RAD<br>NORMAL<br>mR/HR<br>45.0<br>45.0                                                                                    | PROCESS<br>OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS                                                            |             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A                                                            | CPS<br>400.0<br>400.0<br>7700.0                            |
| ROCESS<br>FFGAS LOG RAD A<br>FFGAS LOG RAD B                       | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B                                                        | PROC RAD<br>NORMAL<br>mR/HR<br>45.0<br>45.0                                                                                    | PROCESS<br>OFFGAS POST-TREATM<br>OFFGAS POST-TREATM                                                                               |             | RM-1705-5A<br>RM-1705-5B                                                                          | CPS<br>400.0<br>400.0                                      |
| ROCESS<br>OFFGAS LOG RAD A<br>OFFGAS LOG RAD B                     | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B                                                        | PROC RAD<br>NORMAL<br>mR/HR<br>45.0<br>45.0                                                                                    | PROCESS<br>OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS                                                            |             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A                                                            | CPS<br>400.0<br>400.0<br>7700.0<br>9000.0                  |
| ROCESS<br>OFFGAS LOG RAD A<br>OFFGAS LOG RAD B<br>OARBON BED VAULT | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B<br>RM-1705-60                                          | PROC RAD           NORMAL           mR/HR           45.0           45.0           115.0                                        | PROCESS<br>OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS<br>RBCCW B PROCESS                                         |             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A<br>RM-1705-4B                                              | CPS<br>400.0<br>400.0<br>7700.0                            |
| ROCESS<br>DFFGAS LOG RAD A<br>DFFGAS LOG RAD B<br>DARBON BED VAULT | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B<br>RM-1705-60<br>INSTR NO.                             | PROC RAD           NORMAL           mR/HR           45.0           45.0           115.0           mR/HR                        | PROCESS<br>OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS<br>RBCCW B PROCESS<br>(HI RANGE)                           |             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A<br>RM-1705-4B<br>INSTR NO.                                 | CPS<br>400.0<br>400.0<br>7700.0<br>9000.0<br>R/HR          |
| ROCESS<br>DFFGAS LOG RAD A<br>DFFGAS LOG RAD B                     | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B<br>RM-1705-60<br>INSTR NO.<br>RM-1705-2A               | PROC RAD<br>NORMAL           mR/HR           45.0           45.0           115.0           mR/HR           15.0                | PROCESS<br>OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS<br>RBCCW B PROCESS<br>(HI RANGE)<br>DRYWELL A              |             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A<br>RM-1705-4B<br>INSTR NO.<br>RIT1001-606A                 | CPS<br>400.0<br>400.0<br>7700.0<br>9000.0<br>R/HR<br>1.0   |
| ROCESS<br>OFFGAS LOG RAD A<br>OFFGAS LOG RAD B<br>ARBON BED VAULT  | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B<br>RM-1705-60<br>INSTR NO.<br>RM-1705-2A<br>RM-1705-2B | PROC RAD<br>NORMAL           mR/HR           45.0           45.0           115.0           mR/HR           15.0           18.0 | PROCESS<br>OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS<br>RBCCW B PROCESS<br>(HI RANGE)<br>DRYWELL A<br>DRYWELL B |             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A<br>RM-1705-4B<br>INSTR NO.<br>RIT1001-606A<br>RIT1001-606B | 400.0<br>400.0<br>7700.0<br>9000.0<br>R/HR<br>1.0<br>180.0 |

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# SPDS 111/112 Displays

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| 111 RPV NORMAL        | ]                 | EFFLU              | ENT RADIATION      |             |              | CNTMT NORMAL |
|-----------------------|-------------------|--------------------|--------------------|-------------|--------------|--------------|
|                       |                   | EFFL RAD<br>NORMAL |                    |             |              |              |
| VENT                  | INSTR NO.         | UNITS              | VENT               | INSTR NO.   | UNITS        |              |
| STACK GAS #1          | RM-1705-18A       | 20.0 CPS           | RX BLDG EXH VENT A | RM-1705-32A | 20.0 CPS     |              |
| STACK GAS #2          | RM-1705-18B       | 20.0 CPS           | RX BLDG EXH VENT B | RM-1705-32B | 20.0 CPS     |              |
| MAIN STACK GAS        | RT-1001-608       | DS R/HR            | RX BLDG EXH VENT   | RT-1001-609 | DS R/HR      |              |
| REFUEL FLR VENT EXH A | RM-1705-8A        | 5.0 mR/HR          | RADWASTE EFFLUENT  | RM-1705-30  | 100.0 CPS    |              |
| REFUEL FLR VENT EXH B | RM-1705-8B        | 5.0 mR/HR          | TURB BLDG ROOF EXH | RT-1001-610 | DS R/HR      |              |
| REFUEL FLR VENT EXH C | RM-1705-8C        | 5.0 mR/HR          | SBGT DISCHARGE     | RM-1705-9   | 3.0 mR/HR    |              |
| REFUEL FLR VENT EXH D | RM-1705-8D        | 5.0 mR/HR          |                    |             |              |              |
| REFUEL FLR VENT EXH   |                   | NORMAL             |                    |             |              |              |
|                       |                   |                    |                    | PILGR       | MIM          | 2:00         |
|                       |                   |                    |                    |             |              |              |
| 112 RPV NORMAL        | ]                 | PROCES             | S RADIATION        |             |              | CNTMT NORMAL |
|                       | MSL RAD<br>NORMAL | PROC RAD<br>NORMAL |                    |             |              |              |
| PROCESS               | INSTR NO.         | mR/HR              | PROCESS            |             | INSTR NO.    | CPS          |
| OFFGAS LOG RAD A      | RM-1705-3A        | 45.0               | OFFGAS POST-TREATM | ENT A       | RM-1705-5A   | 400.0        |
| OFFGAS LOG RAD B      | RM-1705-3B        | 45.0               | OFFGAS POST-TREATM | ENT B       | RM-1705-5B   | 400.0        |
|                       |                   |                    |                    |             |              |              |
| CARBON BED VAULT      | RM-1705-60        | 115.0              | RBCCW A PROCESS    |             | RM-1705-4A   | 6700.0       |
|                       |                   |                    | RBCCW B PROCESS    |             | RM-1705-4B   | 8500.0       |
|                       |                   |                    |                    |             |              |              |
| MAIN STEAM LINE       | INSTR NO.         | mR/HR              | (HI RANGE)         |             | INSTR NO.    | R/HR         |
| MAIN STEAM LINE A     | RM-1705-2A        | 15.0               | DRYWELL A          |             | RIT1001-606A | 1.0          |
| MAIN STEAM LINE B     | RM-1705-2B        | 18.0               | DRYWELL B          |             | RIT1001-606B | 230.0        |
| MAIN STEAM LINE C     | RM-1705-2C        | 12.0               | TORUS A            |             | RIT1001-607A | 1.0          |
| MAIN STEAM LINE D     | RM-1705-2D        | 14.0               | TORUS B            |             | RIT1001-607B | 25.0         |
|                       |                   |                    |                    |             |              |              |
|                       |                   |                    |                    | PILGR       | IM           | 2:00         |

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| 111 RPV NORMAL        |                   | EFFLU              | IENT RADIATION     |                                       |              | CNTMT NORMAL |
|-----------------------|-------------------|--------------------|--------------------|---------------------------------------|--------------|--------------|
|                       |                   | EFFL RAD<br>NORMAL |                    |                                       |              |              |
| VENT                  | INSTR NO.         | UNITS              | VENT               | INSTR NO.                             | UNITS        |              |
| STACK GAS #1          | RM-1705-18A       | 20.0 CPS           | RX BLDG EXH VENT A | RM-1705-32A                           | 20.0 CPS     |              |
| STACK GAS #2          | RM-1705-18B       | 20.0 CPS           | RX BLDG EXH VENT B | RM-1705-32B                           | 20.0 CPS     |              |
| MAIN STACK GAS        | RT-1001-608       | DS R/HR            | RX BLDG EXH VENT   | RT-1001-609                           | DS R/HR      |              |
| REFUEL FLR VENT EXH A | RM-1705-8A        | 5.0 mR/HR          | RADWASTE EFFLUENT  | RM-1705-30                            | 100.0 CPS    |              |
| REFUEL FLR VENT EXH B | RM-1705-8B        | 5.0 mR/HR          | TURB BLDG ROOF EXH | RT-1001-610                           | DS R/HR      |              |
| REFUEL FLR VENT EXH C | RM-1705-8C        | 5.0 mR/HR          | SBGT DISCHARGE     | RM-1705-9                             | 3.0 mR/HR    |              |
| REFUEL FLR VENT EXH D | RM-1705-8D        | 5.0 mR/HR          |                    |                                       |              |              |
| REFUEL FLR VENT EXH   |                   | NORMAL             |                    |                                       |              |              |
|                       |                   |                    |                    | PILGR                                 | RIM          | 2:15         |
|                       |                   |                    |                    |                                       |              |              |
| 112 RPV NORMAL        | ]                 | PROCES             | S RADIATION        | <u></u>                               |              | CNTMT NORMAL |
|                       | MSL RAD<br>NORMAL | PROC RAD<br>NORMAL |                    |                                       |              |              |
| PROCESS               | INSTR NO.         | mR/HR              | PROCESS            |                                       | INSTR NO.    | CPS          |
| OFFGAS LOG RAD A      | RM-1705-3A        | 45.0               | OFFGAS POST-TREATM | ENT A                                 | RM-1705-5A   | 400.0        |
| OFFGAS LOG RAD B      | RM-1705-3B        | 45.0               | OFFGAS POST-TREATM | ENT B                                 | RM-1705-5B   | 400.0        |
|                       |                   |                    |                    |                                       |              |              |
| CARBON BED VAULT      | RM-1705-60        | 115.0              | RBCCW A PROCESS    |                                       | RM-1705-4A   | 6400.0       |
|                       |                   |                    | RBCCW B PROCESS    |                                       | RM-1705-4B   | 8400.0       |
|                       |                   |                    |                    |                                       |              |              |
| MAIN STEAM LINE       | INSTR NO.         | mR/HR              | (HI RANGE)         |                                       | INSTR NO.    | R/HR         |
| MAIN STEAM LINE A     | RM-1705-2A        | 15.0               | DRYWELL A          | · · · · · · · · · · · · · · · · · · · | RIT1001-606A | 1.0          |
| MAIN STEAM LINE B     | RM-1705-2B        | 18.0               | DRYWELL B          |                                       | RIT1001-606B | 280.0        |
| MAIN STEAM LINE C     | RM-1705-2C        | 12.0               | TORUS A            |                                       | RIT1001-607A | 1.0          |
| MAIN STEAM LINE D     | RM-1705-2D        | 14.0               | TORUS B            |                                       | RIT1001-607B | 28.0         |
|                       |                   |                    |                    |                                       |              |              |
|                       |                   |                    |                    | <b>B</b> # 6=                         |              |              |
|                       |                   |                    |                    | PILGR                                 |              | 2:15         |

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# SPDS 111/112 Displays

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| 111 RPV NORMAL        | ]                 | EFFLU              | IENT RADIATION     |             |              | CNTMT NORMAL |
|-----------------------|-------------------|--------------------|--------------------|-------------|--------------|--------------|
|                       |                   | EFFL RAD<br>NORMAL |                    |             |              |              |
| VENT                  | INSTR NO.         | UNITS              | VENT               | INSTR NO.   | UNITS        |              |
| STACK GAS #1          | RM-1705-18A       | 20.0 CPS           | RX BLDG EXH VENT A | RM-1705-32A | 20.0 CPS     |              |
| STACK GAS #2          | RM-1705-18B       | 20.0 CPS           | RX BLDG EXH VENT B | RM-1705-32B | 20.0 CPS     |              |
| MAIN STACK GAS        | RT-1001-608       | DS R/HR            | RX BLDG EXH VENT   | RT-1001-609 | DS R/HR      |              |
| REFUEL FLR VENT EXH A | RM-1705-8A        | 5.0 mR/HR          | RADWASTE EFFLUENT  | RM-1705-30  | 100.0 CPS    |              |
| REFUEL FLR VENT EXH B | RM-1705-8B        | 5.0 mR/HR          | TURB BLDG ROOF EXH | RT-1001-610 | DS R/HR      |              |
| REFUEL FLR VENT EXH C | RM-1705-8C        | 5.0 mR/HR          | SBGT DISCHARGE     | RM-1705-9   | 3.0 mR/HR    | ł            |
| REFUEL FLR VENT EXH D | RM-1705-8D        | 5.0 mR/HR          |                    |             |              |              |
| REFUEL FLR VENT EXH   |                   | NORMAL             |                    |             |              |              |
|                       |                   |                    |                    | PILGF       | RIM          | 2::          |
|                       |                   |                    |                    |             |              |              |
| 112 RPV NORMAL        | MSL RAD<br>NORMAL | PROCES             | S RADIATION        |             |              | CNTMT NORMA  |
| PROCESS               | INSTR NO.         | mR/HR              | PROCESS            |             | INSTR NO.    | CPS          |
| OFFGAS LOG RAD A      | RM-1705-3A        | 45.0               | OFFGAS POST-TREATM | ENT A       | RM-1705-5A   | 400.0        |
| FFGAS LOG RAD B       | RM-1705-3B        | 45.0               | OFFGAS POST-TREATM | ENT B       | RM-1705-5B   | 400.0        |
| ARBON BED VAULT       | RM-1705-60        | 115.0              | RBCCW A PROCESS    |             | RM-1705-4A   | 5800.0       |
|                       |                   |                    | RBCCW B PROCESS    |             | RM-1705-4A   | 7000.0       |
|                       |                   |                    | RECORD FROCESS     |             | RM-1705-48   | 7000.0       |
| IAIN STEAM LINE       | INSTR NO.         | mR/HR              | (HI RANGE)         |             | INSTR NO.    | R/HR         |
| IAIN STEAM LINE A     | RM-1705-2A        | 15.0               | DRYWELL A          |             | RIT1001-606A | 1.0          |
| IAIN STEAM LINE B     | RM-1705-2B        | 18.0               | DRYWELL B          |             | RIT1001-606B | 330.0        |
| IAIN STEAM LINE C     | RM-1705-2C        | 12.0               | TORUS A            |             | RIT1001-607A | 1.0          |
| IAIN STEAM LINE D     | RM-1705-2D        | 14.0               | TORUS B            |             | RIT1001-607B | 30.0         |
|                       |                   |                    |                    |             |              |              |
|                       |                   |                    |                    | PILGR       | IM           | 2:3          |

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| 111 RPV NORMAL                                                                                                                  | ]                                                                                                      | EFFLU                                                                                                                 | ENT RADIATION                                                                                                                     |             |                                                                                                   | CNTMT NORMAI                                               |
|---------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------|
|                                                                                                                                 |                                                                                                        | EFFL RAD<br>NORMAL                                                                                                    |                                                                                                                                   |             |                                                                                                   |                                                            |
| VENT                                                                                                                            | INSTR NO.                                                                                              | UNITS                                                                                                                 | VENT                                                                                                                              | INSTR NO.   | UNITS                                                                                             |                                                            |
| STACK GAS #1                                                                                                                    | RM-1705-18A                                                                                            | 20.0 CPS                                                                                                              | RX BLDG EXH VENT A                                                                                                                | RM-1705-32A | 20.0 CPS                                                                                          |                                                            |
| STACK GAS #2                                                                                                                    | RM-1705-18B                                                                                            | 20.0 CPS                                                                                                              | RX BLDG EXH VENT B                                                                                                                | RM-1705-32B | 20.0 CPS                                                                                          |                                                            |
| MAIN STACK GAS                                                                                                                  | RT-1001-608                                                                                            | DS R/HR                                                                                                               | RX BLDG EXH VENT                                                                                                                  | RT-1001-609 | DS R/HR                                                                                           |                                                            |
| REFUEL FLR VENT EXH A                                                                                                           | RM-1705-8A                                                                                             | 5.0 mR/HR                                                                                                             | RADWASTE EFFLUENT                                                                                                                 | RM-1705-30  | 100.0 CPS                                                                                         |                                                            |
| REFUEL FLR VENT EXH B                                                                                                           | RM-1705-8B                                                                                             | 5.0 mR/HR                                                                                                             | TURB BLDG ROOF EXH                                                                                                                | RT-1001-610 | DS R/HR                                                                                           |                                                            |
| REFUEL FLR VENT EXH C                                                                                                           | RM-1705-8C                                                                                             | 5.0 mR/HR                                                                                                             | SBGT DISCHARGE                                                                                                                    | RM-1705-9   | 3.0 mR/HF                                                                                         | ł                                                          |
| REFUEL FLR VENT EXH D                                                                                                           | RM-1705-8D                                                                                             | 5.0 mR/HR                                                                                                             |                                                                                                                                   |             |                                                                                                   |                                                            |
| REFUEL FLR VENT EXH                                                                                                             |                                                                                                        | NORMAL                                                                                                                |                                                                                                                                   |             |                                                                                                   |                                                            |
|                                                                                                                                 |                                                                                                        |                                                                                                                       |                                                                                                                                   | PILGF       | am                                                                                                | 2:                                                         |
|                                                                                                                                 |                                                                                                        |                                                                                                                       |                                                                                                                                   |             |                                                                                                   |                                                            |
| 112                                                                                                                             | ٦                                                                                                      | DDOOFO                                                                                                                | O DADIATION                                                                                                                       |             |                                                                                                   | <b></b>                                                    |
| 112 RPV NORMAL                                                                                                                  | MSL RAD<br>NORMAL                                                                                      | PROCES                                                                                                                | S RADIATION                                                                                                                       |             |                                                                                                   | CNTMT NORMA                                                |
|                                                                                                                                 |                                                                                                        | PROC RAD                                                                                                              | S RADIATION                                                                                                                       |             | INSTR NO.                                                                                         | CNTMT NORMA                                                |
| ROCESS                                                                                                                          | NORMAL                                                                                                 | PROC RAD<br>NORMAL                                                                                                    |                                                                                                                                   | ENT A       | INSTR NO.<br>RM-1705-5A                                                                           |                                                            |
| ROCESS                                                                                                                          | NORMAL                                                                                                 | PROC RAD<br>NORMAL<br>mR/HR                                                                                           | PROCESS                                                                                                                           |             |                                                                                                   | CPS                                                        |
| 112 RPV NORMAL<br>ROCESS<br>OFFGAS LOG RAD A<br>OFFGAS LOG RAD B                                                                | NORMAL<br>INSTR NO.<br>RM-1705-3A                                                                      | PROC RAD<br>NORMAL<br>mR/HR<br>45.0                                                                                   | PROCESS<br>OFFGAS POST-TREATM                                                                                                     |             | RM-1705-5A                                                                                        | CPS<br>400.0<br>400.0                                      |
| ROCESS<br>FFGAS LOG RAD A<br>FFGAS LOG RAD B                                                                                    | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B                                                        | PROC RAD<br>NORMAL<br>mR/HR<br>45.0<br>45.0                                                                           | PROCESS<br>OFFGAS POST-TREATM<br>OFFGAS POST-TREATM                                                                               |             | RM-1705-5A<br>RM-1705-5B                                                                          | CPS<br>400.0                                               |
| ROCESS<br>FFGAS LOG RAD A<br>FFGAS LOG RAD B                                                                                    | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B                                                        | PROC RAD<br>NORMAL<br>mR/HR<br>45.0<br>45.0                                                                           | PROCESS<br>OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS                                                            |             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A                                                            | CPS<br>400.0<br>400.0<br>5200.0                            |
| ROCESS<br>OFFGAS LOG RAD A<br>OFFGAS LOG RAD B                                                                                  | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B                                                        | PROC RAD<br>NORMAL<br>mR/HR<br>45.0<br>45.0                                                                           | PROCESS<br>OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS                                                            |             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A                                                            | CPS<br>400.0<br>400.0<br>5200.0                            |
| ROCESS<br>OFFGAS LOG RAD A<br>OFFGAS LOG RAD B<br>CARBON BED VAULT                                                              | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B                                                        | PROC RAD<br>NORMAL<br>mR/HR<br>45.0<br>45.0                                                                           | PROCESS<br>OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS<br>RBCCW B PROCESS                                         |             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A<br>RM-1705-4B                                              | CPS<br>400.0<br>400.0<br>5200.0<br>6800.0                  |
| PROCESS<br>OFFGAS LOG RAD A<br>OFFGAS LOG RAD B<br>PARBON BED VAULT                                                             | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B<br>RM-1705-60<br>INSTR NO.                             | PROC RAD<br>NORMAL<br>mR/HR<br>45.0<br>115.0<br>mR/HR                                                                 | PROCESS<br>OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS<br>RBCCW B PROCESS<br>(HI RANGE)                           |             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A<br>RM-1705-4B<br>INSTR NO.                                 | CPS<br>400.0<br>400.0<br>5200.0<br>6800.0<br>R/HR          |
| ROCESS<br>OFFGAS LOG RAD A<br>OFFGAS LOG RAD B<br>CARBON BED VAULT<br>IAIN STEAM LINE<br>IAIN STEAM LINE A<br>IAIN STEAM LINE B | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B<br>RM-1705-60<br>INSTR NO.<br>RM-1705-2A               | PROC RAD<br>NORMAL<br>mR/HR<br>45.0<br>45.0<br>115.0<br>mR/HR<br>15.0                                                 | PROCESS<br>OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS<br>RBCCW B PROCESS<br>(HI RANGE)<br>DRYWELL A              |             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A<br>RM-1705-4B<br>INSTR NO.<br>RIT1001-606A                 | CPS<br>400.0<br>400.0<br>5200.0<br>6800.0<br>R/HR<br>1.0   |
| ROCESS<br>DFFGAS LOG RAD A<br>DFFGAS LOG RAD B                                                                                  | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B<br>RM-1705-60<br>INSTR NO.<br>RM-1705-2A<br>RM-1705-2B | PROC RAD         NORMAL         mR/HR         45.0         45.0         115.0         mR/HR         15.0         18.0 | PROCESS<br>OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS<br>RBCCW B PROCESS<br>(HI RANGE)<br>DRYWELL A<br>DRYWELL B |             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A<br>RM-1705-4B<br>INSTR NO.<br>RIT1001-606A<br>RIT1001-606B | 400.0<br>400.0<br>5200.0<br>6800.0<br>R/HR<br>1.0<br>350.0 |

| 111 RPV NORMAL        | ]                 | EFFLU              | ENT RADIATION      |             |            | CNTMT NORMAL |
|-----------------------|-------------------|--------------------|--------------------|-------------|------------|--------------|
|                       |                   | EFFL RAD<br>NORMAL |                    |             |            |              |
| VENT                  | INSTR NO.         | UNITS              | VENT               | INSTR NO. U | JNITS      |              |
| STACK GAS #1          | RM-1705-18A       | 20.0 CPS           | RX BLDG EXH VENT A | RM-1705-32A | 20.0 CPS   |              |
| STACK GAS #2          | RM-1705-18B       | 20.0 CPS           | RX BLDG EXH VENT B | RM-1705-32B | 20.0 CPS   |              |
| MAIN STACK GAS        | RT-1001-608       | DS R/HR            | RX BLDG EXH VENT   | RT-1001-609 | DS R/HR    |              |
| REFUEL FLR VENT EXH A | RM-1705-8A        | 5.0 mR/HR          | RADWASTE EFFLUENT  | RM-1705-30  | 100.0 CPS  |              |
| REFUEL FLR VENT EXH B | RM-1705-8B        | 5.0 mR/HR          | TURB BLDG ROOF EXH | RT-1001-610 | DS R/HR    |              |
| REFUEL FLR VENT EXH C | RM-1705-8C        | 5.0 mR/HR          | SBGT DISCHARGE     | RM-1705-9   | 3.0 mR/HR  |              |
| REFUEL FLR VENT EXH D | RM-1705-8D        | 5.0 mR/HR          |                    |             |            |              |
| REFUEL FLR VENT EXH   |                   | NORMAL             |                    |             |            |              |
|                       |                   |                    |                    | PILGRIM     |            | 3:00         |
|                       |                   |                    |                    |             |            |              |
| 112 RPV NORMAL        | ]                 | PROCES             | S RADIATION        |             |            | CNTMT NORMAL |
|                       | MSL RAD<br>NORMAL | PROC RAD<br>NORMAL |                    |             |            |              |
| PROCESS               | INSTR NO.         | mR/HR              | PROCESS            | IN          | ISTR NO.   | CPS          |
| OFFGAS LOG RAD A      | RM-1705-3A        | 45.0               | OFFGAS POST-TREATM | ENTA RI     | M-1705-5A  | 400.0        |
| OFFGAS LOG RAD B      | RM-1705-3B        | 45.0               | OFFGAS POST-TREATM | ENT B RI    | M-1705-5B  | 400.0        |
|                       |                   |                    |                    |             |            |              |
| CARBON BED VAULT      | RM-1705-60        | 115.0              | RBCCW A PROCESS    | R           | M-1705-4A  | 2800.0       |
|                       |                   |                    | RBCCW B PROCESS    | RI          | M-1705-4B  | 5600.0       |
| MAIN STEAM LINE       | INSTR NO.         | mR/HR              | (HI RANGE)         | IN          | ISTR NO.   | R/HR         |
| MAIN STEAM LINE A     | RM-1705-2A        | 15.0               | DRYWELL A          |             | T1001-606A | 1.0          |
| MAIN STEAM LINE B     | RM-1705-2B        | 18.0               | DRYWELL B          |             | T1001-606B | 360.0        |
| MAIN STEAM LINE C     | RM-1705-2C        | 12.0               | TORUS A            |             | T1001-607A | 1.0          |
| MAIN STEAM LINE D     | RM-1705-2D        | 14.0               | TORUS B            |             | T1001-607B | 38.0         |
|                       |                   |                    |                    |             |            |              |
|                       |                   |                    |                    | PILGRIM     |            | 3:00         |

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# SPDS 111/112 Displays

| 111 RPV NORMAL        | ]                 | EFFLU              | ENT RADIATION      |             |                                               | CNTMT NORMAL                              |
|-----------------------|-------------------|--------------------|--------------------|-------------|-----------------------------------------------|-------------------------------------------|
|                       |                   | EFFL RAD<br>NORMAL |                    |             |                                               | <b></b> , , , , , , , , , , , , , , , , , |
| VENT                  | INSTR NO.         | UNITS              | VENT               | INSTR NO.   | UNITS                                         |                                           |
| STACK GAS #1          | RM-1705-18A       | 1.00E+05 CPS       | RX BLDG EXH VENT A | RM-1705-32A | 20.0 CPS                                      |                                           |
| STACK GAS #2          | RM-1705-18B       | 1.00E+05 CPS       | RX BLDG EXH VENT B | RM-1705-32B | 20.0 CPS                                      |                                           |
| MAIN STACK GAS        | RT-1001-608       | DS R/HR            | RX BLDG EXH VENT   | RT-1001-609 | DS R/HR                                       |                                           |
| REFUEL FLR VENT EXH A | RM-1705-8A        | 5.0 mR/HR          | RADWASTE EFFLUENT  | RM-1705-30  | 100.0 CPS                                     |                                           |
| REFUEL FLR VENT EXH B | RM-1705-8B        | <b>5.0</b> mR/HR   | TURB BLDG ROOF EXH | RT-1001-610 | DS R/HR                                       |                                           |
| REFUEL FLR VENT EXH C | RM-1705-8C        | 5.0 mR/HR          | SBGT DISCHARGE     | RM-1705-9   | 200.0 mR/HR                                   | :                                         |
| REFUEL FLR VENT EXH D | RM-1705-8D        | 5.0 mR/HR          |                    |             |                                               |                                           |
| REFUEL FLR VENT EXH   |                   | NORMAL             |                    |             |                                               |                                           |
|                       |                   |                    |                    | PILGF       | RIM                                           | 3:15                                      |
|                       |                   |                    |                    |             |                                               |                                           |
| 112 RPV NORMAL        | ]                 | PROCES             | S RADIATION        |             | , <u>, , , , , , , , , , , , , , , , , , </u> | CNTMT NORMAL                              |
|                       | MSL RAD<br>NORMAL | PROC RAD<br>NORMAL |                    |             |                                               |                                           |
| PROCESS               | INSTR NO.         | mR/HR              | PROCESS            |             | INSTR NO.                                     | CPS                                       |
| OFFGAS LOG RAD A      | RM-1705-3A        | 45.0               | OFFGAS POST-TREATM | ENT A       | RM-1705-5A                                    | 400.0                                     |
| OFFGAS LOG RAD B      | RM-1705-3B        | 45.0               | OFFGAS POST-TREATM | ENT B       | RM-1705-5B                                    | 400.0                                     |
|                       |                   |                    |                    |             |                                               |                                           |
| CARBON BED VAULT      | RM-1705-60        | 115.0              | RBCCW A PROCESS    |             | RM-1705-4A                                    | 1800.0                                    |
|                       |                   |                    | RBCCW B PROCESS    |             | RM-1705-4B                                    | 4400.0                                    |
|                       |                   |                    |                    |             |                                               |                                           |
| MAIN STEAM LINE       | INSTR NO.         | mR/HR              | (HI RANGE)         |             | INSTR NO.                                     | R/HR                                      |
| MAIN STEAM LINE A     | RM-1705-2A        | 15.0               | DRYWELL A          |             | RIT1001-606A                                  | 1.0                                       |
| MAIN STEAM LINE B     | RM-1705-2B        | 18.0               | DRYWELL B          |             | RIT1001-606B                                  | 380.0                                     |
| MAIN STEAM LINE C     | RM-1705-2C        | 12.0               | TORUS A            |             | RIT1001-607A                                  | 1.0                                       |
| MAIN STEAM LINE D     | RM-1705-2D        | 14.0               | TORUS B            |             | RIT1001-607B                                  | 40.0                                      |
|                       |                   |                    |                    |             |                                               |                                           |
| ;                     |                   |                    |                    | PILGF       | aw                                            | 3:15                                      |

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| 111 RPV NORMAL        | ]                 | EFFLU              | ENT RADIATION      |             |              | CNTMT NORMAL |
|-----------------------|-------------------|--------------------|--------------------|-------------|--------------|--------------|
|                       |                   | EFFL RAD<br>NORMAL |                    |             |              |              |
| VENT                  | INSTR NO.         | UNITS              | VENT               | INSTR NO.   | UNITS        |              |
| STACK GAS #1          | RM-1705-18A       | 5.00E+05 CPS       | RX BLDG EXH VENT A | RM-1705-32A | 20.0 CPS     |              |
| STACK GAS #2          | RM-1705-18B       | 5.00E+05 CPS       | RX BLDG EXH VENT B | RM-1705-32B | 20.0 CPS     |              |
| MAIN STACK GAS        | RT-1001-608       | DS R/HR            | RX BLDG EXH VENT   | RT-1001-609 | DS R/HR      |              |
| REFUEL FLR VENT EXH A | RM-1705-8A        | 5.0 mR/HR          | RADWASTE EFFLUENT  | RM-1705-30  | 100.0 CPS    |              |
| REFUEL FLR VENT EXH B | RM-1705-8B        | 5.0 mR/HR          | TURB BLDG ROOF EXH | RT-1001-610 | DS R/HR      |              |
| REFUEL FLR VENT EXH C | RM-1705-8C        | 5.0 mR/HR          | SBGT DISCHARGE     | RM-1705-9   | 400.0 mR/HR  | :            |
| REFUEL FLR VENT EXH D | RM-1705-8D        | 5.0 mR/HR          |                    |             |              |              |
| REFUEL FLR VENT EXH   |                   | NORMAL             |                    |             |              |              |
|                       |                   |                    |                    | PILGF       | RIM          | 3:30         |
|                       |                   |                    |                    |             |              |              |
|                       | ]                 | PROCES             | S RADIATION        |             |              | CNTMT NORMAL |
|                       | MSL RAD<br>NORMAL | PROC RAD<br>NORMAL |                    |             |              |              |
| PROCESS               | INSTR NO.         | mR/HR              | PROCESS            |             | INSTR NO.    | CPS          |
| OFFGAS LOG RAD A      | RM-1705-3A        | 45.0               | OFFGAS POST-TREATM | ENT A       | RM-1705-5A   | 400.0        |
| OFFGAS LOG RAD B      | RM-1705-3B        | 45.0               | OFFGAS POST-TREATM | IENT B      | RM-1705-5B   | 400.0        |
|                       |                   |                    |                    |             |              |              |
| CARBON BED VAULT      | RM-1705-60        | 115.0              | RBCCW A PROCESS    |             | RM-1705-4A   | 1500.0       |
|                       |                   |                    | RBCCW B PROCESS    |             | RM-1705-4B   | 3500.0       |
|                       |                   |                    |                    |             |              |              |
| MAIN STEAM LINE       | INSTR NO.         | mR/HR              | (HI RANGE)         |             | INSTR NO.    | R/HR         |
| MAIN STEAM LINE A     | RM-1705-2A        | 15.0               | DRYWELL A          |             | RIT1001-606A | 1.0          |
| MAIN STEAM LINE B     | RM-1705-2B        | 18.0               | DRYWELL B          |             | RIT1001-606B | 380.0        |
| MAIN STEAM LINE C     | RM-1705-2C        | 12.0               | TORUS A            |             | RIT1001-607A | 1.0          |
| MAIN STEAM LINE D     | RM-1705-2D        | 14.0               | TORUS B            |             | RIT1001-607B | 40.0         |
|                       |                   |                    |                    |             |              |              |
|                       |                   |                    |                    | PILGF       | RIM          | 3:30         |

| 111 RPV NORMAL        | ]                 | EFFLU              | ENT RADIATION      |             |              | CNTMT NORMAL |
|-----------------------|-------------------|--------------------|--------------------|-------------|--------------|--------------|
|                       |                   | EFFL RAD<br>NORMAL |                    |             |              |              |
| VENT                  | INSTR NO.         | UNITS              | VENT               | INSTR NO.   | UNITS        |              |
| STACK GAS #1          | RM-1705-18A       | 5.00E+05 CPS       | RX BLDG EXH VENT A | RM-1705-32A | 20.0 CPS     |              |
| STACK GAS #2          | RM-1705-18B       | 5.00E+05 CPS       | RX BLDG EXH VENT B | RM-1705-32B | 20.0 CPS     |              |
| MAIN STACK GAS        | RT-1001-608       | DS R/HR            | RX BLDG EXH VENT   | RT-1001-609 | DS R/HR      |              |
| REFUEL FLR VENT EXH A | RM-1705-8A        | 5.0 mR/HR          | RADWASTE EFFLUENT  | RM-1705-30  | 100.0 CPS    |              |
| REFUEL FLR VENT EXH B | RM-1705-8B        | 5.0 mR/HR          | TURB BLDG ROOF EXH | RT-1001-610 | DS R/HR      |              |
| REFUEL FLR VENT EXH C | RM-1705-8C        | 5.0 mR/HR          | SBGT DISCHARGE     | RM-1705-9   | 700.0 mR/HR  |              |
| REFUEL FLR VENT EXH D | RM-1705-8D        | 5.0 mR/HR          |                    |             |              |              |
| REFUEL FLR VENT EXH   |                   | NORMAL             |                    |             |              |              |
|                       |                   |                    |                    | PILGF       | RIM          | 3:45         |
|                       |                   |                    |                    |             |              |              |
| 112 RPV NORMAL        | ]                 | PROCES             | S RADIATION        |             |              | CNTMT NORMAL |
|                       | MSL RAD<br>NORMAL | PROC RAD<br>NORMAL |                    |             |              |              |
| PROCESS               | INSTR NO.         | mR/HR              | PROCESS            |             | INSTR NO.    | CPS          |
| OFFGAS LOG RAD A      | RM-1705-3A        | 45.0               | OFFGAS POST-TREATM | ENT A       | RM-1705-5A   | 400.0        |
| OFFGAS LOG RAD B      | RM-1705-3B        | 45.0               | OFFGAS POST-TREATM | ENT B       | RM-1705-5B   | 400.0        |
|                       |                   |                    |                    |             |              |              |
| CARBON BED VAULT      | RM-1705-60        | 115.0              | RBCCW A PROCESS    |             | RM-1705-4A   | 1200.0       |
|                       |                   |                    | RBCCW B PROCESS    |             | RM-1705-4B   | 2000.0       |
|                       |                   |                    |                    |             |              |              |
| MAIN STEAM LINE       | INSTR NO.         | mR/HR              | (HI RANGE)         |             | INSTR NO.    | R/HR         |
| MAIN STEAM LINE A     | RM-1705-2A        | 15.0               | DRYWELL A          |             | RIT1001-606A | 1.0          |
| MAIN STEAM LINE B     | RM-1705-2B        | 18.0               | DRYWELL B          |             | RIT1001-606B | 380.0        |
| MAIN STEAM LINE C     | RM-1705-2C        | 12.0               | TORUS A            |             | RIT1001-607A | 1.0          |
| MAIN STEAM LINE D     | RM-1705-2D        | 14.0               | TORUS B            |             | RIT1001-607B | 40.0         |
|                       |                   |                    |                    |             |              |              |
|                       |                   |                    |                    | PILGF       | RIM          | 3:45         |

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|                                                                                                             | ]                                                                                        | EFFLU                                                                                                           | IENT RADIATION                                                                                                       |             |                                                                                   |                                                         |
|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------|---------------------------------------------------------|
|                                                                                                             |                                                                                          | EFFL RAD<br>NORMAL                                                                                              |                                                                                                                      |             |                                                                                   |                                                         |
| VENT                                                                                                        | INSTR NO.                                                                                | UNITS                                                                                                           | VENT                                                                                                                 | INSTR NO.   | UNITS                                                                             |                                                         |
| STACK GAS #1                                                                                                | RM-1705-18A                                                                              | 4.00E+05 CPS                                                                                                    | RX BLDG EXH VENT A                                                                                                   | RM-1705-32A | 20.0 CPS                                                                          |                                                         |
| STACK GAS #2                                                                                                | RM-1705-18B                                                                              | 4.00E+05 CPS                                                                                                    | RX BLDG EXH VENT B                                                                                                   | RM-1705-32B | 20.0 CPS                                                                          |                                                         |
| MAIN STACK GAS                                                                                              | RT-1001-608                                                                              | DS R/HR                                                                                                         | RX BLDG EXH VENT                                                                                                     | RT-1001-609 | DS R/HR                                                                           |                                                         |
| REFUEL FLR VENT EXH A                                                                                       | RM-1705-8A                                                                               | 5.0 mR/HR                                                                                                       | RADWASTE EFFLUENT                                                                                                    | RM-1705-30  | 100.0 CPS                                                                         |                                                         |
| REFUEL FLR VENT EXH B                                                                                       | RM-1705-8B                                                                               | 5.0 mR/HR                                                                                                       | TURB BLDG ROOF EXH                                                                                                   | RT-1001-610 | DS R/HR                                                                           |                                                         |
| REFUEL FLR VENT EXH C                                                                                       | RM-1705-8C                                                                               | 5.0 mR/HR                                                                                                       | SBGT DISCHARGE                                                                                                       | RM-1705-9   | 800.0 mR/HR                                                                       |                                                         |
| REFUEL FLR VENT EXH D                                                                                       | RM-1705-8D                                                                               | 5.0 mR/HR                                                                                                       |                                                                                                                      |             |                                                                                   |                                                         |
| REFUEL FLR VENT EXH                                                                                         |                                                                                          | NORMAL                                                                                                          |                                                                                                                      |             |                                                                                   |                                                         |
|                                                                                                             |                                                                                          |                                                                                                                 |                                                                                                                      | PILGF       | RIM                                                                               |                                                         |
|                                                                                                             |                                                                                          |                                                                                                                 |                                                                                                                      |             |                                                                                   |                                                         |
| 112 RPV NORMAL                                                                                              | ]                                                                                        |                                                                                                                 | S RADIATION                                                                                                          |             |                                                                                   | CNTMT NOR                                               |
| 112 RPV NORMAL                                                                                              | MSL RAD<br>NORMAL                                                                        | PROCES<br>PROC RAD<br>NORMAL                                                                                    | S RADIATION                                                                                                          |             |                                                                                   | CNTMT NOR                                               |
| 112 RPV NORMAL                                                                                              |                                                                                          | PROC RAD                                                                                                        | S RADIATION                                                                                                          |             | INSTR NO.                                                                         | CNTMT NOR                                               |
|                                                                                                             | NORMAL                                                                                   | PROC RAD<br>NORMAL                                                                                              |                                                                                                                      | ENT A       | INSTR NO.<br>RM-1705-5A                                                           | <b>L</b>                                                |
| PROCESS<br>OFFGAS LOG RAD A                                                                                 | NORMAL                                                                                   | PROC RAD<br>NORMAL<br>mR/HR                                                                                     | PROCESS                                                                                                              |             |                                                                                   | CPS                                                     |
| PROCESS                                                                                                     | NORMAL<br>INSTR NO.<br>RM-1705-3A                                                        | PROC RAD<br>NORMAL<br>mR/HR<br>45.0                                                                             | PROCESS<br>OFFGAS POST-TREATM                                                                                        |             | RM-1705-5A                                                                        | CPS<br>400.0<br>400.0                                   |
| PROCESS<br>OFFGAS LOG RAD A<br>OFFGAS LOG RAD B                                                             | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B                                          | PROC RAD<br>NORMAL<br>mR/HR<br>45.0<br>45.0                                                                     | PROCESS<br>OFFGAS POST-TREATM<br>OFFGAS POST-TREATM                                                                  |             | RM-1705-5A<br>RM-1705-5B                                                          | CPS<br>400.0<br>400.0<br>800.0                          |
| PROCESS<br>OFFGAS LOG RAD A<br>OFFGAS LOG RAD B                                                             | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B                                          | PROC RAD<br>NORMAL<br>mR/HR<br>45.0<br>45.0                                                                     | PROCESS<br>OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS                                               |             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A                                            | CPS<br>400.0<br>400.0<br>800.0                          |
| PROCESS<br>OFFGAS LOG RAD A<br>OFFGAS LOG RAD B                                                             | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B                                          | PROC RAD<br>NORMAL<br>mR/HR<br>45.0<br>45.0                                                                     | PROCESS<br>OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS                                               |             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A                                            | CPS<br>400.0<br>400.0<br>800.0                          |
| PROCESS<br>OFFGAS LOG RAD A<br>OFFGAS LOG RAD B<br>CARBON BED VAULT                                         | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B<br>RM-1705-60                            | PROC RAD           NORMAL           mR/HR           45.0           45.0           115.0                         | PROCESS<br>OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS<br>RBCCW B PROCESS                            |             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A<br>RM-1705-4B                              | 400.0<br>400.0<br>800.0<br>1500.0                       |
| PROCESS<br>OFFGAS LOG RAD A<br>OFFGAS LOG RAD B<br>CARBON BED VAULT<br>MAIN STEAM LINE<br>MAIN STEAM LINE A | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B<br>RM-1705-60                            | PROC RAD           NORMAL           mR/HR           45.0           115.0                                        | PROCESS<br>OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS<br>RBCCW B PROCESS<br>(HI RANGE)              |             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A<br>RM-1705-4B<br>INSTR NO.                 | CPS<br>400.0<br>400.0<br>800.0<br>1500.0<br>R/HR        |
| PROCESS<br>OFFGAS LOG RAD A<br>OFFGAS LOG RAD B<br>CARBON BED VAULT<br>MAIN STEAM LINE                      | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B<br>RM-1705-60<br>INSTR NO.<br>RM-1705-2A | PROC RAD<br>NORMAL           mR/HR           45.0           45.0           115.0           mR/HR           15.0 | PROCESS<br>OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS<br>RBCCW B PROCESS<br>(HI RANGE)<br>DRYWELL A |             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A<br>RM-1705-4B<br>INSTR NO.<br>RIT1001-606A | CPS<br>400.0<br>400.0<br>800.0<br>1500.0<br>R/HR<br>1.0 |

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| 111 RPV NORMAL        | ]           | EFFLU            | ENT RADIATION      |             |              | CNTMT NORMAL |
|-----------------------|-------------|------------------|--------------------|-------------|--------------|--------------|
|                       |             | EFFL RAD         |                    |             |              |              |
|                       |             | NORMAL           |                    |             |              |              |
| VENT                  | INSTR NO.   | UNITS            | VENT               | INSTR NO.   | UNITS        |              |
| STACK GAS #1          | RM-1705-18A | 4.00E+05 CPS     | RX BLDG EXH VENT A | RM-1705-32A | 20.0 CPS     |              |
| STACK GAS #2          | RM-1705-18B | 4.00E+05 CPS     | RX BLDG EXH VENT B | RM-1705-32B | 20.0 CPS     |              |
| MAIN STACK GAS        | RT-1001-608 | DS R/HR          | RX BLDG EXH VENT   | RT-1001-609 | DS R/HR      |              |
| REFUEL FLR VENT EXH A | RM-1705-8A  | <b>5.0</b> mR/HR | RADWASTE EFFLUENT  | RM-1705-30  | 100.0 CPS    |              |
| REFUEL FLR VENT EXH B | RM-1705-8B  | 5.0 mR/HR        | TURB BLDG ROOF EXH | RT-1001-610 | DS R/HR      |              |
| REFUEL FLR VENT EXH C | RM-1705-8C  | 5.0 mR/HR        | SBGT DISCHARGE     | RM-1705-9   | 800.0 mR/HR  |              |
| REFUEL FLR VENT EXH D | RM-1705-8D  | 5.0 mR/HR        |                    |             |              |              |
| REFUEL FLR VENT EXH   |             | NORMAL           |                    |             |              |              |
|                       |             |                  |                    | PILGF       | RIM ***      | 4:15         |
|                       |             |                  |                    |             |              |              |
| 112 RPV NORMAL        | ]           | PROCES           | S RADIATION        |             | <u></u>      |              |
|                       | MSL RAD     | PROC RAD         |                    |             |              |              |
|                       | NORMAL      | NORMAL           |                    |             |              |              |
| PROCESS               | INSTR NO.   | mR/HR            | PROCESS            |             | INSTR NO.    | CPS          |
| OFFGAS LOG RAD A      | RM-1705-3A  | 45.0             | OFFGAS POST-TREATM | ENT A       | RM-1705-5A   | 400.0        |
| OFFGAS LOG RAD B      | RM-1705-3B  | 45.0             | OFFGAS POST-TREATM | ENT B       | RM-1705-5B   | 400.0        |
|                       |             |                  |                    |             |              |              |
| CARBON BED VAULT      | RM-1705-60  | 115.0            | RBCCW A PROCESS    |             | RM-1705-4A   | 800.0        |
|                       |             |                  | RBCCW B PROCESS    |             | RM-1705-4B   | 1500.0       |
|                       |             |                  |                    |             |              |              |
| MAIN STEAM LINE       | INSTR NO.   | mR/HR            | (HI RANGE)         |             | INSTR NO.    | R/HR         |
| MAIN STEAM LINE A     | RM-1705-2A  | 15.0             | DRYWELL A          |             | RIT1001-606A | 1.0          |
| MAIN STEAM LINE B     | RM-1705-2B  | 18.0             | DRYWELL B          |             | RIT1001-606B | 380.0        |
| MAIN STEAM LINE C     | RM-1705-2C  | 12.0             | TORUS A            |             | RIT1001-607A | 1.0          |
| MAIN STEAM LINE D     | RM-1705-2D  | 14.0             | TORUS B            |             | RIT1001-607B | 40.0         |
|                       |             |                  |                    |             |              |              |
|                       |             |                  |                    | PILGR       | RIM ***      | 4:15         |

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# SPDS 111/112 Displays

| 111 RPV NORMAL                                           | ]                                     | EFFLU                  | IENT RADIATION                                                                       | <u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u> | n an the first fir | CNTMT NORMAL                            |
|----------------------------------------------------------|---------------------------------------|------------------------|--------------------------------------------------------------------------------------|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
|                                                          |                                       | EFFL RAD<br>NORMAL     |                                                                                      |                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                         |
| VENT                                                     | INSTR NO.                             | UNITS                  | VENT                                                                                 | INSTR NO.                                    | UNITS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                         |
| STACK GAS #1                                             | RM-1705-18A                           | 3.00E+05 CPS           | RX BLDG EXH VENT A                                                                   | RM-1705-32A                                  | 20.0 CPS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                         |
| STACK GAS #2                                             | RM-1705-18B                           | 3.00E+05 CPS           | RX BLDG EXH VENT B                                                                   | RM-1705-32B                                  | 20.0 CPS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                         |
| MAIN STACK GAS                                           | RT-1001-608                           | DS R/HR                | RX BLDG EXH VENT                                                                     | RT-1001-609                                  | DS R/HR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                         |
| REFUEL FLR VENT EXH A                                    | RM-1705-8A                            | 5.0 mR/HR              | RADWASTE EFFLUENT                                                                    | RM-1705-30                                   | 100.0 CPS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                         |
| REFUEL FLR VENT EXH B                                    | RM-1705-8B                            | 5.0 mR/HR              | TURB BLDG ROOF EXH                                                                   | RT-1001-610                                  | DS R/HR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                         |
| REFUEL FLR VENT EXH C                                    | RM-1705-8C                            | 5.0 mR/HR              | SBGT DISCHARGE                                                                       | RM-1705-9                                    | 800.0 mR/HR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                         |
| REFUEL FLR VENT EXH D                                    | RM-1705-8D                            | 5.0 mR/HR              |                                                                                      |                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                         |
| REFUEL FLR VENT EXH                                      |                                       | NORMAL                 |                                                                                      |                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                         |
|                                                          |                                       |                        |                                                                                      | PILGR                                        | 11M ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 4:30                                    |
|                                                          |                                       |                        |                                                                                      |                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                         |
| 112 RPV NORMAL                                           | ]                                     | PROCES                 | S RADIATION                                                                          |                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | CNTMT NORMAL                            |
| · · · · · ·                                              | MSL RAD<br>NORMAL                     | PROC RAD<br>NORMAL     |                                                                                      |                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                         |
| PROCESS                                                  | INSTR NO.                             | mR/HR                  | PROCESS                                                                              |                                              | INSTR NO.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | CPS                                     |
| OFFGAS LOG RAD A                                         | RM-1705-3A                            | 45.0                   | OFFCAS DOST TOTATM                                                                   |                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                         |
|                                                          |                                       |                        | OFFGAS POST-TREATM                                                                   | ENT A                                        | RM-1705-5A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 400.0                                   |
| OFFGAS LOG RAD B                                         | RM-1705-3B                            | 45.0                   | OFFGAS POST-TREATM                                                                   |                                              | RM-1705-5A<br>RM-1705-5B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 400.0<br>400.0                          |
|                                                          |                                       | Lanna                  | OFFGAS POST-TREATM                                                                   |                                              | RM-1705-5B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 400.0                                   |
| CARBON BED VAULT                                         | RM-1705-3B<br>RM-1705-60              | 45.0<br>115.0          | OFFGAS POST-TREATM                                                                   |                                              | RM-1705-5B<br>RM-1705-4A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 400.0<br>800.0                          |
|                                                          |                                       | Lanna                  | OFFGAS POST-TREATM                                                                   |                                              | RM-1705-5B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 400.0                                   |
|                                                          |                                       | 115.0                  | OFFGAS POST-TREATM                                                                   |                                              | RM-1705-5B<br>RM-1705-4A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 400.0<br>800.0                          |
| CARBON BED VAULT                                         | RM-1705-60                            |                        | OFFGAS POST-TREATME<br>RBCCW A PROCESS<br>RBCCW B PROCESS                            |                                              | RM-1705-5B<br>RM-1705-4A<br>RM-1705-4B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 400.0<br>800.0<br>1500.0<br>R/HR        |
| CARBON BED VAULT                                         | RM-1705-60<br>INSTR NO.               | 115.0<br>mR/HR<br>15.0 | OFFGAS POST-TREATM<br>RBCCW A PROCESS<br>RBCCW B PROCESS<br>(HI RANGE)               |                                              | RM-1705-5B<br>RM-1705-4A<br>RM-1705-4B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 400.0<br>800.0<br>1500.0                |
| CARBON BED VAULT<br>MAIN STEAM LINE<br>MAIN STEAM LINE A | RM-1705-60<br>INSTR NO.<br>RM-1705-2A | mR/HR<br>15.0<br>18.0  | OFFGAS POST-TREATME<br>RBCCW A PROCESS<br>RBCCW B PROCESS<br>(HI RANGE)<br>DRYWELL A |                                              | RM-1705-5B<br>RM-1705-4A<br>RM-1705-4B<br>INSTR NO.<br>RIT1001-606A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 400.0<br>800.0<br>1500.0<br>R/HR<br>1.0 |

PILGRIM \*\*\*

4:30

|                                        | ]           | EFFLU              | JENT RADIATION     |             |              | CNTMT NORM |
|----------------------------------------|-------------|--------------------|--------------------|-------------|--------------|------------|
|                                        |             | EFFL RAD<br>NORMAL |                    |             |              |            |
| VENT                                   | INSTR NO.   | UNITS              | VENT               | INSTR NO.   | UNITS        |            |
| STACK GAS #1                           | RM-1705-18A | 1.00E+05 CPS       | RX BLDG EXH VENT A | RM-1705-32A | 20.0 CPS     |            |
| STACK GAS #2                           | RM-1705-18B | 1.00E+05 CPS       | RX BLDG EXH VENT B | RM-1705-32B | 20.0 CPS     |            |
| MAIN STACK GAS                         | RT-1001-608 | DS R/HR            | RX BLDG EXH VENT   | RT-1001-609 | DS R/HR      |            |
| REFUEL FLR VENT EXH A                  | RM-1705-8A  | <b>5.0</b> mR/HR   | RADWASTE EFFLUENT  | RM-1705-30  | 100.0 CPS    |            |
| REFUEL FLR VENT EXH B                  | RM-1705-8B  | 5.0 mR/HR          | TURB BLDG ROOF EXH | RT-1001-610 | DS R/HR      |            |
| REFUEL FLR VENT EXH C                  | RM-1705-8C  | 5.0 mR/HR          | SBGT DISCHARGE     | RM-1705-9   | 800.0 mR/HR  |            |
| REFUEL FLR VENT EXH D                  | RM-1705-8D  | 5.0 mR/HR          |                    |             |              |            |
| REFUEL FLR VENT EXH                    |             | NORMAL             |                    |             |              |            |
|                                        |             |                    |                    | PILGP       | RIM          | 4          |
|                                        | ]           | PROCES             | S RADIATION        |             |              |            |
|                                        | MSL RAD     | PROC RAD           |                    |             |              |            |
|                                        | NORMAL      | NORMAL             |                    |             |              |            |
| PROCESS                                | INSTR NO.   | mR/HR              | PROCESS            | ·······     | INSTR NO.    | CPS        |
| OFFGAS LOG RAD A                       | RM-1705-3A  | 45.0               | OFFGAS POST-TREATM | ENT A       | RM-1705-5A   | 400.0      |
| OFFGAS LOG RAD B                       | RM-1705-3B  | 45.0               | OFFGAS POST-TREATM | ENT B       | RM-1705-5B   | 400.0      |
| CARBON BED VAULT                       | RM-1705-60  | 115.0              | RBCCW A PROCESS    |             | RM-1705-4A   | 800.0      |
|                                        |             | L                  | RBCCW B PROCESS    |             | RM-1705-4B   | 1500.0     |
|                                        |             |                    |                    |             | 100-4B       | 1500.0     |
| MAIN STEAM LINE                        | INSTR NO.   | mR/HR              | (HI RANGE)         |             | INSTR NO.    | R/HR       |
|                                        | RM-1705-2A  | 15.0               | DRYWELL A          |             | RIT1001-606A | 1.0        |
| MAIN STEAM LINE A                      | RM-1705-2B  | 18.0               | DRYWELL B          |             | RIT1001- 8   | 380.0      |
| MAIN STEAM LINE A<br>MAIN STEAM LINE B | RIM-1/00-28 |                    |                    |             |              |            |
|                                        | RM-1705-28  | 12.0               | TORUS A            |             | RIT1001-607A | 1.00       |

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# SPDS 111/112 Displays

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| 111 RPV NORMAL        | ]                 | EFFLU              | ENT RADIATION      |             |              | CNTMT NORMAL |
|-----------------------|-------------------|--------------------|--------------------|-------------|--------------|--------------|
|                       |                   | EFFL RAD<br>NORMAL |                    |             |              |              |
| VENT                  | INSTR NO.         | UNITS              | VENT               | INSTR NO.   | UNITS        |              |
| STACK GAS #1          | RM-1705-18A       | 9.00E+04 CPS       | RX BLDG EXH VENT A | RM-1705-32A | 20.0 CPS     |              |
| STACK GAS #2          | RM-1705-18B       | 9.00E+04 CPS       | RX BLDG EXH VENT B | RM-1705-32B | 20.0 CPS     |              |
| MAIN STACK GAS        | RT-1001-608       | DS R/HR            | RX BLDG EXH VENT   | RT-1001-609 | DS R/HR      |              |
| REFUEL FLR VENT EXH A | RM-1705-8A        | 5.0 mR/HR          | RADWASTE EFFLUENT  | RM-1705-30  | 100.0 CPS    |              |
| REFUEL FLR VENT EXH B | RM-1705-8B        | 5.0 mR/HR          | TURB BLDG ROOF EXH | RT-1001-610 | DS R/HR      |              |
| REFUEL FLR VENT EXH C | RM-1705-8C        | 5.0 mR/HR          | SBGT DISCHARGE     | RM-1705-9   | 800.0 mR/HR  |              |
| REFUEL FLR VENT EXH D | RM-1705-8D        | 5.0 mR/HR          |                    |             |              |              |
| REFUEL FLR VENT EXH   |                   | NORMAL             |                    |             |              |              |
|                       |                   |                    |                    | PILGF       | RIM ***      | 5:00         |
|                       |                   |                    |                    |             |              |              |
| 112 RPV NORMAL        | 1                 | PROCES             | S RADIATION        |             | 28           |              |
|                       |                   |                    |                    |             |              | CNTMT NORMAL |
|                       | MSL RAD<br>NORMAL | PROC RAD<br>NORMAL |                    |             |              |              |
| PROCESS               | INSTR NO.         | mR/HR              | PROCESS            |             | INSTR NO.    | CPS          |
| OFFGAS LOG RAD A      | RM-1705-3A        | 45.0               | OFFGAS POST-TREATM | ENT A       | RM-1705-5A   | 400.0        |
| OFFGAS LOG RAD B      | RM-1705-3B        | 45.0               | OFFGAS POST-TREATM | ENT B       | RM-1705-5B   | 400.0        |
|                       |                   |                    |                    |             |              |              |
| CARBON BED VAULT      | RM-1705-60        | 115.0              | RBCCW A PROCESS    |             | RM-1705-4A   | 800.0        |
|                       |                   |                    | RBCCW B PROCESS    |             | RM-1705-4B   | 1500.0       |
|                       |                   |                    |                    |             |              |              |
| MAIN STEAM LINE       | INSTR NO.         | mR/HR              | (HI RANGE)         |             | INSTR NO.    | R/HR         |
| MAIN STEAM LINE A     | RM-1705-2A        | 15.0               | DRYWELL A          |             | RIT1001-606A | 1.0          |
| MAIN STEAM LINE B     | RM-1705-2B        | 18.0               | DRYWELL B          |             | RIT1001-606B | 380.0        |
| MAIN STEAM LINE C     | RM-1705-2C        | 12.0               | TORUS A            |             | RIT1001-607A | 1.0          |
| MAIN STEAM LINE D     | RM-1705-2D        | 14.0               | TORUS B            |             | RIT1001-607B | 40.0         |
|                       |                   |                    |                    |             | •            |              |
|                       |                   |                    |                    | PILGR       | IM ***       | 5:00         |

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|                                                                                                  |                                                                                          | EFFLU                                                     | JENT RADIATION                                                                                            |                             |                                                                                   | CNTMT NOR                                     |
|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------|
|                                                                                                  |                                                                                          | EFFL RAD<br>NORMAL                                        |                                                                                                           |                             |                                                                                   |                                               |
| VENT                                                                                             | INSTR NO.                                                                                | UNITS                                                     | VENT                                                                                                      | INSTR NO.                   | UNITS                                                                             |                                               |
| STACK GAS #1                                                                                     | RM-1705-18A                                                                              | 8.50E+04 CPS                                              | RX BLDG EXH VENT A                                                                                        | RM-1705-32A                 | 20.0 CPS                                                                          |                                               |
| STACK GAS #2                                                                                     | RM-1705-18B                                                                              | 8.50E+04 CPS                                              | RX BLDG EXH VENT B                                                                                        | RM-1705-32B                 | 20.0 CPS                                                                          |                                               |
| MAIN STACK GAS                                                                                   | RT-1001-608                                                                              | DS R/HR                                                   | RX BLDG EXH VENT                                                                                          | RT-1001-609                 | DS R/HR                                                                           |                                               |
| REFUEL FLR VENT EXH A                                                                            | RM-1705-8A                                                                               | 5.0 mR/HR                                                 | RADWASTE EFFLUENT                                                                                         | <b>RM-</b> 17 <b>05</b> -30 | 100.0 CPS                                                                         |                                               |
| REFUEL FLR VENT EXH B                                                                            | RM-1705-8B                                                                               | 5.0 mR/HR                                                 | TURB BLDG ROOF EXH                                                                                        | RT-1001-610                 | DS R/HR                                                                           |                                               |
| REFUEL FLR VENT EXH C                                                                            | RM-1705-8C                                                                               | 5.0 mR/HR                                                 | SBGT DISCHARGE                                                                                            | RM-1705-9                   | 800.0 mR/HR                                                                       |                                               |
| REFUEL FLR VENT EXH D                                                                            | RM-1705-8D                                                                               | <b>5.0</b> mR/HR                                          |                                                                                                           |                             |                                                                                   |                                               |
| REFUEL FLR VENT EXH                                                                              |                                                                                          | NORMAL                                                    |                                                                                                           |                             |                                                                                   |                                               |
|                                                                                                  |                                                                                          |                                                           |                                                                                                           | PILGF                       | MIM                                                                               |                                               |
|                                                                                                  | MSL RAD                                                                                  |                                                           |                                                                                                           |                             |                                                                                   |                                               |
|                                                                                                  | NORMAL                                                                                   | PROC RAD<br>NORMAL                                        |                                                                                                           |                             |                                                                                   |                                               |
| PROCESS                                                                                          |                                                                                          |                                                           | PROCESS                                                                                                   |                             | INSTR NO.                                                                         | CPS                                           |
| PROCESS<br>DFFGAS LOG RAD A                                                                      | NORMAL                                                                                   | NORMAL                                                    | PROCESS<br>OFFGAS POST-TREATM                                                                             | ENT A                       | INSTR NO.<br>RM-1705-5A                                                           | CPS<br>400.0                                  |
| OFFGAS LOG RAD A                                                                                 | NORMAL                                                                                   | MORMAL<br>mR/HR                                           |                                                                                                           |                             |                                                                                   |                                               |
|                                                                                                  | NORMAL<br>INSTR NO.<br>RM-1705-3A                                                        | MORMAL<br>mR/HR<br>45.0                                   | OFFGAS POST-TREATM                                                                                        |                             | RM-1705-5A<br>RM-1705-5B                                                          | 400.0<br>400.0                                |
| DFFGAS LOG RAD A<br>DFFGAS LOG RAD B                                                             | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B                                          | NORMAL<br>mR/HR<br>45.0<br>45.0                           | OFFGAS POST-TREATM<br>OFFGAS POST-TREATM                                                                  |                             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A                                            | 400.0<br>400.0<br>800.0                       |
| DFFGAS LOG RAD A<br>DFFGAS LOG RAD B                                                             | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B                                          | NORMAL<br>mR/HR<br>45.0<br>45.0                           | OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS                                               |                             | RM-1705-5A<br>RM-1705-5B                                                          | 400.0<br>400.0                                |
| DFFGAS LOG RAD A<br>DFFGAS LOG RAD B                                                             | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B                                          | NORMAL<br>mR/HR<br>45.0<br>45.0                           | OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS                                               |                             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A                                            | 400.0<br>400.0<br>800.0                       |
| DFFGAS LOG RAD A<br>DFFGAS LOG RAD B<br>CARBON BED VAULT                                         | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B<br>RM-1705-60                            | NORMAL<br>mR/HR<br>45.0<br>45.0                           | OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS<br>RBCCW B PROCESS                            |                             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A<br>RM-1705-4B                              | 400.0<br>400.0<br>800.0<br>0.0                |
| DFFGAS LOG RAD A<br>DFFGAS LOG RAD B<br>CARBON BED VAULT<br>MAIN STEAM LINE                      | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B<br>RM-1705-60                            | NORMAL<br>mR/HR<br>45.0<br>45.0<br>115.0<br>mR/HR         | OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS<br>RBCCW B PROCESS<br>(HI RANGE)              |                             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A<br>RM-1705-4B<br>INSTR NO.                 | 400.0<br>400.0<br>800.0<br>0.0<br>R/HR        |
| DFFGAS LOG RAD A<br>DFFGAS LOG RAD B<br>CARBON BED VAULT<br>MAIN STEAM LINE<br>MAIN STEAM LINE A | NORMAL<br>INSTR NO.<br>RM-1705-3A<br>RM-1705-3B<br>RM-1705-60<br>INSTR NO.<br>RM-1705-2A | NORMAL<br>mR/HR<br>45.0<br>45.0<br>115.0<br>mR/HR<br>15.0 | OFFGAS POST-TREATM<br>OFFGAS POST-TREATM<br>RBCCW A PROCESS<br>RBCCW B PROCESS<br>(HI RANGE)<br>DRYWELL A |                             | RM-1705-5A<br>RM-1705-5B<br>RM-1705-4A<br>RM-1705-4B<br>INSTR NO.<br>RIT1001-606A | 400.0<br>400.0<br>800.0<br>0.0<br>R/HR<br>1.0 |

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# SPDS 111/112 Displays

| ····· ··· ··· ··· ··· ··· ··· ··· ··· |                   |                    |                    |             |              |             |
|---------------------------------------|-------------------|--------------------|--------------------|-------------|--------------|-------------|
| 111 RPV NORMAL                        |                   | EFFLU              | IENT RADIATION     |             |              | CNTMT NORMA |
|                                       |                   | EFFL RAD<br>NORMAL |                    |             |              |             |
| VENT                                  | INSTR NO.         | UNITS              | VENT               | INSTR NO.   | UNITS        |             |
| STACK GAS #1                          | RM-1705-18A       | 7.20E+04 CPS       | RX BLDG EXH VENT A | RM-1705-32A | 20.0 CPS     |             |
| STACK GAS #2                          | RM-1705-18B       | 7.20E+04 CPS       | RX BLDG EXH VENT B | RM-1705-32B | 20.0 CPS     |             |
| MAIN STACK GAS                        | RT-1001-608       | DS R/HR            | RX BLDG EXH VENT   | RT-1001-609 | DS R/HR      |             |
| REFUEL FLR VENT EXH A                 | RM-1705-8A        | 5.0 mR/HR          | RADWASTE EFFLUENT  | RM-1705-30  | 100.0 CPS    |             |
| REFUEL FLR VENT EXH B                 | RM-1705-8B        | 5.0 mR/HR          | TURB BLDG ROOF EXH | RT-1001-610 | DS R/HR      |             |
| REFUEL FLR VENT EXH C                 | RM-1705-8C        | 5.0 mR/HR          | SBGT DISCHARGE     | RM-1705-9   | 800.0 mR/HR  |             |
| REFUEL FLR VENT EXH D                 | RM-1705-8D        | 5.0 mR/HR          |                    |             |              |             |
| REFUEL FLR VENT EXH                   |                   | NORMAL             |                    |             |              |             |
|                                       |                   |                    |                    | PILGF       | RIM          | 5:3         |
|                                       |                   |                    |                    |             |              |             |
| 112 RPV NORMAL                        | ]                 | PROCES             | S RADIATION        |             |              | CNTMT NORMA |
|                                       | MSL RAD<br>NORMAL | PROC RAD<br>NORMAL |                    |             |              |             |
| PROCESS                               | INSTR NO.         | mR/HR              | PROCESS            |             | INSTR NO.    | CPS         |
| OFFGAS LOG RAD A                      | RM-1705-3A        | 45.0               | OFFGAS POST-TREATM | ENT A       | RM-1705-5A   | 400.0       |
| OFFGAS LOG RAD B                      | RM-1705-3B        | 45.0               | OFFGAS POST-TREATM | ENT B       | RM-1705-5B   | 400.0       |
|                                       |                   |                    |                    |             |              |             |
| CARBON BED VAULT                      | RM-1705-60        | 115.0              | RBCCW A PROCESS    |             | RM-1705-4A   | 800.0       |
|                                       |                   |                    | RBCCW B PROCESS    |             | RM-1705-4B   | 1500.0      |
| MAIN STEAM LINE                       | INSTR NO.         | mR/HR              | (HI RANGE)         |             | INSTR NO.    | R/HR        |
| MAIN STEAM LINE A                     | RM-1705-2A        | 15.0               | DRYWELL A          |             | RIT1001-606A | 1.0         |
| MAIN STEAM LINE B                     | RM-1705-2B        | 18.0               | DRYWELL B          |             | RIT1001-606B | 380.0       |
| MAIN STEAM LINE C                     | RM-1705-2C        | 12.0               | TORUS A            |             | RIT1001-607A | 1.0         |
| MAIN STEAM LINE D                     | RM-1705-2D        | 14.0               | TORUS B            |             | RIT1001-607B | 40.0        |
|                                       |                   |                    |                    |             |              |             |
|                                       |                   |                    |                    | PILGR       |              |             |
|                                       |                   |                    |                    | FILGR       |              | 5:3         |

413 NORMAL

# AREA RADIATION

MSL RAD

NORMAL

AREA RAD

NORMAL

EFFL RAD

NORMAL

NORMAL

| AREA (HI RANGE) | INSTR NO.      | R/HR |
|-----------------|----------------|------|
| DRYWELL A       | RIT1001-606A   | 2.5  |
| DRYWELL B       | RIT 1001-606B  | 2.8  |
| TORUS A         | RIT1001-607A   | DS   |
| TORUS B         | RIT1001-607B [ | DS   |

| AREA                        | INSTR NO.  | mR/HR |
|-----------------------------|------------|-------|
| MAIN CONTROL ROOM           | RE-3       | 0.04  |
| MAIN CONTROL ROOM INTAKE    | RM-1705-16 | 0.05  |
| RX BLDG OUTSIDE TIP RM      | RE-8       | 0.08  |
| RX BLDG ACCESS-SE           | RE-10      | 4.0   |
| TURB BLDG COND PMP STAIRWAY | RE-1       | 3.0   |
| TURBINE FRONT STANDARD      | RE-4       | 50.0  |
| FW HEATER STAIRWAY          | RE-2       | 145.0 |

| AREA                       | INSTR NO.     | mR/HR |
|----------------------------|---------------|-------|
| NEW FUEL RACKS             | RE-11         | 0.2   |
| REFUEL FLR-NEW FUEL VAULT  | <b>RE-1</b> 2 | 0.5   |
| REFUEL FLR-SPENT FUEL POOL | RE-14         | 10.0  |
| REFUEL FLR-SHIELD          | RE-13         | 1.0   |

| RADWASTE SUMP              | RE-6 | 20.0 |
|----------------------------|------|------|
| RADWASTE CHEM WST REC TANK | RE-7 | 10.0 |
| RADWASTE CORRIDOR          | RE-5 | 10.0 |
| RADWASTE SHIPPING LOCK     | RE-9 | 3.0  |

PILGRIM \*\*\*

0:00

NORMAL

**1999 Evaluated Exercise** 

## **AREA RADIATION**

|                            |               |        | SL RAD<br>ORMAL | AREA RAD<br>NORMAL         |           |       |
|----------------------------|---------------|--------|-----------------|----------------------------|-----------|-------|
| AREA (HI RANGE)            | INSTR NO.     | R/HR   |                 | AREA                       | INSTR NO. | mR/HR |
| DRYWELL A                  | RIT1001-606A  | 1.2    |                 | NEW FUEL RACKS             | RE-11     | 0.2   |
| DRYWELL B                  | RIT 1001-606B | 1.2    |                 | REFUEL FLR-NEW FUEL VAULT  | RE-12     | 0.5   |
| TORUS A                    | RIT1001-607A  | 1.1    |                 | REFUEL FLR-SPENT FUEL POOL | RE-14     | 10.0  |
| TORUS B                    | RIT1001-607B  | 1.1    |                 | REFUEL FLR-SHIELD          | RE-13     | 1.0   |
| AREA                       | INSTR NO.     | mR/HR  |                 |                            |           |       |
| MAIN CONTROL ROOM          | RE-3          | 0.04   |                 | RADWASTE SUMP              | RE-6      | 20.0  |
| MAIN CONTROL ROOM INTAKE   | RM-1705-16    | 0.05   |                 | RADWASTE CHEM WST REC TANK | K RE-7    | 10.0  |
| RX BLDG OUTSIDE TIP RM     | RE-8          | 0.08   |                 | RADWASTE CORRIDOR          | RE-5      | 10.0  |
| RX BLDG ACCESS-SE          | RE-10         | 4.0    |                 | RADWASTE SHIPPING LOCK     | RE-9      | 3.0   |
| TURB BLDG COND PMP STAIRWA | Y RE-1        | 20.0   |                 |                            |           |       |
| TURBINE FRONT STANDARD     | RE-4          | 500.0  |                 |                            |           |       |
| FW HEATER STAIRWAY         | RE-2          | 1500.0 |                 | PILGRIM ***                | 00:1      | 0     |

NORMAL

## AREA RADIATION

|                            |               | EFFL RAD<br>NORMAL | MSL RAD<br>NORMAL | AREA RAD<br>NORMAL         |           |       |
|----------------------------|---------------|--------------------|-------------------|----------------------------|-----------|-------|
| AREA (HI RANGE)            | INSTR NO.     | R/HR               |                   | AREA                       | INSTR NO. | mR/HR |
| DRYWELL A                  | RIT1001-606A  | 1.0                |                   | NEW FUEL RACKS             | RE-11     | 0.2   |
| DRYWELL B                  | RIT 1001-606B | 5.0                |                   | REFUEL FLR-NEW FUEL VAULT  | RE-12     | 0.5   |
| TORUS A                    | RIT1001-607A  | 1.0                |                   | REFUEL FLR-SPENT FUEL POOL | RE-14     | 10.0  |
| TORUS B                    | RIT1001-607B  | 2.0                |                   | REFUEL FLR-SHIELD          | RE-13     | 0.9   |
| AREA                       | INSTR NO.     | mR/HR              |                   |                            |           |       |
| MAIN CONTROL ROOM          | RE-3          | 0.04               |                   | RADWASTE SUMP              | RE-6      | 20.0  |
| MAIN CONTROL ROOM INTAKE   | RM-1705-16    | 0.05               |                   | RADWASTE CHEM WST REC TAN  | K RE-7    | 10.0  |
| RX BLDG OUTSIDE TIP RM     | RE-8          | 8.0                |                   | RADWASTE CORRIDOR          | RE-5      | 10.0  |
| RX BLDG ACCESS-SE          | RE-10         | 40.0               |                   | RADWASTE SHIPPING LOCK     | RE-9      | 3.0   |
| TURB BLDG COND PMP STAIRWA | Y RE-1        | 10.0               |                   |                            |           |       |
| TURBINE FRONT STANDARD     | RE-4          | 380.0              |                   |                            |           |       |
| FW HEATER STAIRWAY         | RE-2          | 950.0              |                   | PILGRIM ***                | 0:        | 15    |

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NORMAL



## **AREA RADIATION**

|                             |               | EFFL RAD MSL RAD<br>NORMAL NORMAL | AREA RAD<br>NORMAL         |           |       |
|-----------------------------|---------------|-----------------------------------|----------------------------|-----------|-------|
| AREA (HI RANGE)             | INSTR NO.     | R/HR                              | AREA                       | INSTR NO. | mR/HR |
| DRYWELL A                   | RIT1001-606A  | 1.0                               | NEW FUEL RACKS             | RE-11     | 0.2   |
| DRYWELL B                   | RIT 1001-606B | 10.0                              | REFUEL FLR-NEW FUEL VAULT  | RE-12     | 0.5   |
| TORUS A                     | RIT1001-607A  | 1.0                               | REFUEL FLR-SPENT FUEL POOL | RE-14     | 10.0  |
| TORUS B                     | RIT1001-607B  | 4.0                               | REFUEL FLR-SHIELD          | RE-13     | 0.9   |
| AREA                        | INSTR NO.     | mR/HR                             |                            |           |       |
| MAIN CONTROL ROOM           | RE-3          | 0.04                              | RADWASTE SUMP              | RE-6      | 20.0  |
| MAIN CONTROL ROOM INTAKE    | RM-1705-16    | 0.05                              | RADWASTE CHEM WST REC TANK | RE-7      | 10.0  |
| RX BLDG OUTSIDE TIP RM      | RE-8          | 8.0                               | RADWASTE CORRIDOR          | RE-5      | 10.0  |
| RX BLDG ACCESS-SE           | RE-10         | 40.0                              | RADWASTE SHIPPING LOCK     | RE-9      | 3.0   |
| TURB BLDG COND PMP STAIRWAY | ( RE-1        | 8.0                               |                            |           |       |
| TURBINE FRONT STANDARD      | RE-4          | 220.0                             |                            |           |       |
| FW HEATER STAIRWAY          | RE-2          | 640.0                             | PILGRIM ***                | 0:30      |       |

### **AREA RADIATION**

#### NORMAL

|                             |               | EFFL RAD MSL RAD<br>NORMAL NORMAL | AREA RAD<br>NORMAL         |           |       |
|-----------------------------|---------------|-----------------------------------|----------------------------|-----------|-------|
| AREA (HI RANGE)             | INSTR NO.     | R/HR                              | AREA                       | INSTR NO. | mR/HR |
| DRYWELL A                   | RIT1001-606A  | 1.0                               | NEW FUEL RACKS             | RE-11     | 0.2   |
| DRYWELL B                   | RIT 1001-606B | 30.0                              | REFUEL FLR-NEW FUEL VAULT  | RE-12     | 0.5   |
| TORUS A                     | RIT1001-607A  | 1.0                               | REFUEL FLR-SPENT FUEL POOL | RE-14     | 10.0  |
| TORUS B                     | RIT1001-607B  | 8.0                               | REFUEL FLR-SHIELD          | RE-13     | 0.9   |
| AREA                        | INSTR NO.     | mR/HR                             |                            |           |       |
| MAIN CONTROL ROOM           | RE-3          | 0.04                              | RADWASTE SUMP              | RE-6      | 20.0  |
| MAIN CONTROL ROOM INTAKE    | RM-1705-16    | 0.05                              | RADWASTE CHEM WST REC TANK | RE-7      | 10.0  |
| RX BLDG OUTSIDE TIP RM      | RE-8          | 8.0                               | RADWASTE CORRIDOR          | RE-5      | 10.0  |
| RX BLDG ACCESS-SE           | RE-10         | 40.0                              | RADWASTE SHIPPING LOCK     | RE-9      | 3.0   |
| TURB BLDG COND PMP STAIRWAY | ( RE-1        | 2.0                               |                            |           |       |
| TURBINE FRONT STANDARD      | RE-4          | 2.0                               |                            |           |       |
| FW HEATER STAIRWAY          | RE-2          | 5.0                               | PILGRIM ***                | 0:45      |       |

413

NORMAL

This is a Drill

NORMAL

## **AREA RADIATION**

|                            |               | EFFL RAD<br>NORMAL | MSL RAD<br>NORMAL | AREA RAD<br>NORMAL         |           |       |
|----------------------------|---------------|--------------------|-------------------|----------------------------|-----------|-------|
| AREA (HI RANGE)            | INSTR NO.     | R/HR               |                   | AREA                       | INSTR NO. | mR/HR |
| DRYWELL A                  | RIT1001-606A  | 1.0                |                   | NEW FUEL RACKS             | RE-11     | 0.2   |
| DRYWELL B                  | RIT 1001-606B | 90.0               |                   | REFUEL FLR-NEW FUEL VAULT  | RE-12     | 0.5   |
| TORUS A                    | RIT1001-607A  | 1.0                |                   | REFUEL FLR-SPENT FUEL POOL | RE-14     | 10.0  |
| TORUS B                    | RIT1001-607B  | 9.0                |                   | REFUEL FLR-SHIELD          | RE-13     | 0.9   |
| AREA                       | INSTR NO.     | mR/HR              |                   |                            |           |       |
| MAIN CONTROL ROOM          | RE-3          | 0.04               |                   | RADWASTE SUMP              | RE-6      | 20.0  |
| MAIN CONTROL ROOM INTAKE   | RM-1705-16    | 0.05               |                   | RADWASTE CHEM WST REC TAN  | K RE-7    | 10.0  |
| RX BLDG OUTSIDE TIP RM     | RE-8          | 8.0                |                   | RADWASTE CORRIDOR          | RE-5      | 10.0  |
| RX BLDG ACCESS-SE          | RE-10         | 40.0               |                   | RADWASTE SHIPPING LOCK     | RE-9      | 3.0   |
| TURB BLDG COND PMP STAIRWA | / RE-1        | 2.0                |                   |                            |           |       |
| TURBINE FRONT STANDARD     | RE-4          | 1.0                |                   |                            |           |       |
| FW HEATER STAIRWAY         | RE-2          | 4.0                |                   | PILGRIM ***                | 1:00      |       |

NORMAL

## **AREA RADIATION**

|                            |               | EFFL RAD<br>NORMAL | MSL RAD<br>NORMAL | AREA RAD<br>NORMAL         |           |       |
|----------------------------|---------------|--------------------|-------------------|----------------------------|-----------|-------|
| AREA (HI RANGE)            | INSTR NO.     | R/HR               |                   | AREA                       | INSTR NO. | mR/HR |
| DRYWELL A                  | RIT1001-606A  | 1.0                |                   | NEW FUEL RACKS             | RE-11     | 0.2   |
| DRYWELL B                  | RIT 1001-606B | 120.0              |                   | REFUEL FLR-NEW FUEL VAULT  | RE-12     | 0.5   |
| TORUS A                    | RIT1001-607A  | 1.0                |                   | REFUEL FLR-SPENT FUEL POOL | RE-14     | 10.0  |
| TORUS B                    | RIT1001-607B  | 10.0               |                   | REFUEL FLR-SHIELD          | RE-13     | 0.9   |
| AREA                       | INSTR NO.     | mR/HR              |                   |                            |           |       |
| MAIN CONTROL ROOM          | RE-3          | 0.04               |                   | RADWASTE SUMP              | RE-6      | 20.0  |
| MAIN CONTROL ROOM INTAKE   | RM-1705-16    | 0.05               |                   | RADWASTE CHEM WST REC TANK | RE-7      | 10.0  |
| RX BLDG OUTSIDE TIP RM     | RE-8          | 8.0                |                   | RADWASTE CORRIDOR          | RE-5      | 10.0  |
| RX BLDG ACCESS-SE          | RE-10         | 40.0               |                   | RADWASTE SHIPPING LOCK     | RE-9      | 3.0   |
| TURB BLDG COND PMP STAIRWA | r RE-1        | 2.0                |                   |                            |           |       |
| TURBINE FRONT STANDARD     | RE-4          | 1.0                |                   |                            |           |       |
| FW HEATER STAIRWAY         | RE-2          | 4.0                |                   | PILGRIM ***                | 1:15      |       |

NORMAL

## **AREA RADIATION**

|                             |               | EFFL RAD<br>NORMAL | MSL RAD<br>NORMAL | AREA RAD<br>NORMAL         |           |       |
|-----------------------------|---------------|--------------------|-------------------|----------------------------|-----------|-------|
| AREA (HI RANGE)             | INSTR NO.     | R/HR               |                   | AREA                       | INSTR NO. | mR/HR |
| DRYWELL A                   | RIT1001-606A  | 1.0                |                   | NEW FUEL RACKS             | RE-11     | 0.2   |
| DRYWELL B                   | RIT 1001-606B | 150.0              |                   | REFUEL FLR-NEW FUEL VAULT  | RE-12     | 0.5   |
| TORUS A                     | RIT1001-607A  | 1.0                |                   | REFUEL FLR-SPENT FUEL POOL | RE-14     | 10.0  |
| TORUS B                     | RIT1001-607B  | 15.0               |                   | REFUEL FLR-SHIELD          | RE-13     | 0.9   |
| AREA                        | INSTR NO.     | mR/HR              |                   |                            |           |       |
| MAIN CONTROL ROOM           | RE-3          | 0.04               |                   | RADWASTE SUMP              | RE-6      | 20.0  |
| MAIN CONTROL ROOM INTAKE    | RM-1705-16    | 0.05               |                   | RADWASTE CHEM WST REC TANK | RE-7      | 10.0  |
| RX BLDG OUTSIDE TIP RM      | RE-8          | 8.0                |                   | RADWASTE CORRIDOR          | RE-5      | 10.0  |
| RX BLDG ACCESS-SE           | RE-10         | 40.0               |                   | RADWASTE SHIPPING LOCK     | RE-9      | 3.0   |
| TURB BLDG COND PMP STAIRWAY | r RE-1        | 2.0                |                   |                            |           |       |
| TURBINE FRONT STANDARD      | RE-4          | 1.0                |                   |                            |           |       |
| FW HEATER STAIRWAY          | RE-2          | 4.0                |                   | PILGRIM ***                | 1         | :30   |

NORMAL

## **AREA RADIATION**

|                            |               | EFFL RAD<br>NORMAL | MSL RAD<br>NORMAL | AREA RAD<br>NORMAL         |           |       |
|----------------------------|---------------|--------------------|-------------------|----------------------------|-----------|-------|
| AREA (HI RANGE)            | INSTR NO.     | R/HR               |                   | AREA                       | INSTR NO. | mR/HR |
| DRYWELL A                  | RIT1001-606A  | 1.0                |                   | NEW FUEL RACKS             | RE-11     | 0.2   |
| DRYWELL B                  | RIT 1001-606B | 180.0              |                   | REFUEL FLR-NEW FUEL VAULT  | RE-12     | 0.5   |
| TORUS A                    | RIT1001-607A  | 1.0                |                   | REFUEL FLR-SPENT FUEL POOL | RE-14     | 10.0  |
| TORUS B                    | RIT1001-607B  | 20.0               |                   | REFUEL FLR-SHIELD          | RE-13     | 0.9   |
| AREA                       | INSTR NO.     | mR/HR              |                   |                            |           |       |
| MAIN CONTROL ROOM          | RE-3          | 0.04               |                   | RADWASTE SUMP              | RE-6      | 20.0  |
| MAIN CONTROL ROOM INTAKE   | RM-1705-16    | 0.05               |                   | RADWASTE CHEM WST REC TANK | K RE-7    | 10.0  |
| RX BLDG OUTSIDE TIP RM     | RE-8          | 8.0                |                   | RADWASTE CORRIDOR          | RE-5      | 10.0  |
| RX BLDG ACCESS-SE          | RE-10         | 40.0               |                   | RADWASTE SHIPPING LOCK     | RE-9      | 3.0   |
| TURB BLDG COND PMP STAIRWA | Y RE-1        | 2.0                |                   |                            |           |       |
| TURBINE FRONT STANDARD     | RE-4          | 1.0                |                   |                            |           |       |
| FW HEATER STAIRWAY         | RE-2          | 4.0                |                   | PILGRIM ***                | 1:4       | 15    |

NORMAL

## **AREA RADIATION**

|                             |               | EFFL RAD<br>NORMAL | MSL RAD<br>NORMAL | AREA RAD<br>NORMAL         |           |       |
|-----------------------------|---------------|--------------------|-------------------|----------------------------|-----------|-------|
| AREA (HI RANGE)             | INSTR NO.     | R/HR               |                   | AREA                       | INSTR NO. | mR/HR |
| DRYWELL A                   | RIT1001-606A  | 1.0                |                   | NEW FUEL RACKS             | RE-11     | 0.2   |
| DRYWELL B                   | RIT 1001-606B | 230.0              |                   | REFUEL FLR-NEW FUEL VAULT  | RE-12     | 0.5   |
| TORUS A                     | RIT1001-607A  | 1.0                |                   | REFUEL FLR-SPENT FUEL POOL | RE-14     | 10.0  |
| TORUS B                     | RIT1001-607B  | 25.0               |                   | REFUEL FLR-SHIELD          | RE-13     | 0.9   |
| AREA                        | INSTR NO.     | mR/HR              |                   |                            |           |       |
| MAIN CONTROL ROOM           | RE-3          | 0.04               |                   | RADWASTE SUMP              | RE-6      | 20.0  |
| MAIN CONTROL ROOM INTAKE    | RM-1705-16    | 0.05               |                   | RADWASTE CHEM WST REC TANK | RE-7      | 10.0  |
| RX BLDG OUTSIDE TIP RM      | RE-8          | 8.0                |                   | RADWASTE CORRIDOR          | RE-5      | 10.0  |
| RX BLDG ACCESS-SE           | RE-10         | 40.0               |                   | RADW&STE SHIPPING LOCK     | RE-9      | 3.0   |
| TURB BLDG COND PMP STAIRWAY | / RE-1        | 2.0                |                   |                            |           |       |
| TURBINE FRONT STANDARD      | RE-4          | 1.0                |                   |                            |           |       |
| FW HEATER STAIRWAY          | RE-2          | 4.0                |                   | PILGRIM ***                | 2:00      |       |

NORMAL

## AREA RADIATION

|                            |               | EFFL RAD MSL RAI<br>NORMAL NORMA |                            |           |       |
|----------------------------|---------------|----------------------------------|----------------------------|-----------|-------|
| AREA (HI RANGE)            | INSTR NO.     | R/HR                             | AREA                       | INSTR NO. | mR/HR |
| DRYWELL A                  | RIT1001-606A  | 1.0                              | NEW FUEL RACKS             | RE-11     | 0.2   |
| DRYWELL B                  | RIT 1001-606B | 280.0                            | REFUEL FLR-NEW FUEL VAULT  | RE-12     | 0.5   |
| TORUS A                    | RIT1001-607A  | 1.0                              | REFUEL FLR-SPENT FUEL POOL | RE-14     | 10.0  |
| TORUS B                    | RIT1001-607B  | 28.0                             | REFUEL FLR-SHIELD          | RE-13     | 0.9   |
| AREA                       | INSTR NO.     | mR/HR                            |                            |           |       |
| MAIN CONTROL ROOM          | RE-3          | 0.04                             | RADWASTE SUMP              | RE-6      | 20.0  |
| MAIN CONTROL ROOM INTAKE   | RM-1705-16    | 0.05                             | RADWASTE CHEM WST REC TANK | KRE-7     | 10.0  |
| RX BLDG OUTSIDE TIP RM     | RE-8          | 8.0                              | RADWASTE CORRIDOR          | RE-5      | 10.0  |
| RX BLDG ACCESS-SE          | RE-10         | 40.0                             | RADWASTE SHIPPING LOCK     | RE-9      | 3.0   |
| TURB BLDG COND PMP STAIRWA | Y RE-1        | 2.0                              |                            |           |       |
| TURBINE FRONT STANDARD     | RE-4          | 1.0                              |                            |           |       |
| FW HEATER STAIRWAY         | RE-2          | 4.0                              | PILGRIM ***                | 2:15      |       |

NORMAL

### **AREA RADIATION**

|                             |               | EFFL RAD MSL R<br>NORMAL NORM |                            |           |       |
|-----------------------------|---------------|-------------------------------|----------------------------|-----------|-------|
| AREA (HI RANGE)             | INSTR NO.     | R/HR                          | AREA                       | INSTR NO. | mR/HR |
| DRYWELL A                   | RIT1001-606A  | 1.0                           | NEW FUEL RACKS             | RE-11     | 0.2   |
| DRYWELL B                   | RIT 1001-606B | 330.0                         | REFUEL FLR-NEW FUEL VAULT  | RE-12     | 0.5   |
| TORUS A                     | RIT1001-607A  | 1.0                           | REFUEL FLR-SPENT FUEL POOL | RE-14     | 10.0  |
| TORUS B                     | RIT1001-607B  | 30.0                          | REFUEL FLR-SHIELD          | RE-13     | 0.9   |
| AREA                        | INSTR NO.     | mR/HR                         |                            |           |       |
| MAIN CONTROL ROOM           | RE-3          | 0.04                          | RADWASTE SUMP              | RE-6      | 20.0  |
| MAIN CONTROL ROOM INTAKE    | RM-1705-16    | 0.05                          | RADWASTE CHEM WST REC TAN  | K RE-7    | 10.0  |
| RX BLDG OUTSIDE TIP RM      | RE-8          | 8.0                           | RADWASTE CORRIDOR          | RE-5      | 10.0  |
| RX BLDG ACCESS-SE           | RE-10         | 40.0                          | RADWASTE SHIPPING LOCK     | RE-9      | 3.0   |
| TURB BLDG COND PMP STAIRWAY | Y RE-1        | 2.0                           |                            |           |       |
| TURBINE FRONT STANDARD      | RE-4          | 1.0                           |                            |           |       |
| FW HEATER STAIRWAY          | RE-2          | 4.0                           | PILGRIM ***                | 2:30      | )     |

NORMAL

## **AREA RADIATION**

|                             |               | EFFL RAD MSL RAD<br>NORMAL NORMAL | AREA RAD<br>NORMAL         |           |       |
|-----------------------------|---------------|-----------------------------------|----------------------------|-----------|-------|
| AREA (HI RANGE)             | INSTR NO.     | R/HR                              | AREA                       | INSTR NO. | mR/HR |
| DRYWELL A                   | RIT1001-606A  | 1.0                               | NEW FUEL RACKS             | RE-11     | 0.2   |
| DRYWELL B                   | RIT 1001-606B | 350.0                             | REFUEL FLR-NEW FUEL VAULT  | RE-12     | 0.5   |
| TORUS A                     | RIT1001-607A  | 1.0                               | REFUEL FLR-SPENT FUEL POOL | RE-14     | 10.0  |
| TORUS B                     | RIT1001-607B  | 35.0                              | REFUEL FLR-SHIELD          | RE-13     | 0.9   |
| AREA                        | INSTR NO.     | mR/HR                             |                            |           |       |
| MAIN CONTROL ROOM           | RE-3          | 0.04                              | RADWASTE SUMP              | RE-6      | 20.0  |
| MAIN CONTROL ROOM INTAKE    | RM-1705-16    | 0.05                              | RADWASTE CHEM WST REC TANK | RE-7      | 10.0  |
| RX BLDG OUTSIDE TIP RM      | RE-8          | 8.0                               | RADWASTE CORRIDOR          | RE-5      | 10.0  |
| RX BLDG ACCESS-SE           | RE-10         | 40.0                              | RADWASTE SHIPPING LOCK     | RE-9      | 3.0   |
| TURB BLDG COND PMP STAIRWAY | ( RE-1        | 2.0                               |                            |           |       |
| TURBINE FRONT STANDARD      | RE-4          | 1.0                               |                            |           |       |
| FW HEATER STAIRWAY          | RE-2          | 4.0                               | PILGRIM ***                | 2:45      |       |

NORMAL

## **AREA RADIATION**

|                             |               | EFFL RAD<br>NORMAL | MSL RAD<br>NORMAL | AREA RAD<br>NORMAL |                     |           |       |
|-----------------------------|---------------|--------------------|-------------------|--------------------|---------------------|-----------|-------|
| AREA (HI RANGE)             | INSTR NO.     | R/HR               |                   | AREA               |                     | INSTR NO. | mR/HR |
| DRYWELL A                   | RIT1001-606A  | 1.0                |                   | NEW FUEL           | RACKS               | RE-11     | 0.2   |
| DRYWELL B                   | RIT 1001-606B | 360.0              |                   | REFUEL F           | LR-NEW FUEL VAULT   | RE-12     | 0.5   |
| TORUS A                     | RIT1001-607A  | 1.0                |                   | REFUEL FI          | LR-SPENT FUEL POOL  | RE-14     | 10.0  |
| TORUS B                     | RIT1001-607B  | 38.0               |                   | REFUEL FI          | LR-SHIELD           | RE-13     | 0.9   |
| AREA                        | INSTR NO.     | mR/HR              |                   |                    |                     |           |       |
| MAIN CONTROL ROOM           | RE-3          | 0.04               |                   | RADWAST            | E SUMP              | RE-6      | 20.0  |
| MAIN CONTROL ROOM INTAKE    | RM-1705-16    | 0.05               |                   | RADWAST            | E CHEM WST REC TANK | RE-7      | 10.0  |
| RX BLDG OUTSIDE TIP RM      | RE-8          | 8.0                |                   | RADWAST            | E CORRIDOR          | RE-5      | 10.0  |
| RX BLDG ACCESS-SE           | RE-10         | 40.0               |                   | RADWAST            | E SHIPPING LOCK     | RE-9      | 3.0   |
| TURB BLDG COND PMP STAIRWAY | / RE-1        | 2.0                |                   |                    |                     |           |       |
| TURBINE FRONT STANDARD      | RE-4          | 1.0                |                   |                    |                     |           |       |
| FW HEATER STAIRWAY          | RE-2          | 4.0                |                   |                    | PILGRIM ***         | 3:00      |       |

NORMAL

## **AREA RADIATION**

|                             |               | EFFL RAD MSL RAD |                                  |           |       |
|-----------------------------|---------------|------------------|----------------------------------|-----------|-------|
| AREA (HI RANGE)             | INSTR NO.     | R/HR             | AREA                             | INSTR NO. | mR/HR |
| DRYWELL A                   | RIT1001-606A  | 1.0              | NEW FUEL RACKS                   | RE-11     | 0.2   |
| DRYWELL B                   | RIT 1001-606B | 380.0            | <b>REFUEL FLR-NEW FUEL VAULT</b> | RE-12     | 0.5   |
| TORUS A                     | RIT1001-607A  | 1.0              | REF#&L FLR-SPENT FUEL POOL       | RE-14     | 10.0  |
| TORUS B                     | RIT1001-607B  | 40.0             | REFUEL FLR-SHIELD                | RE-13     | 0.9   |
| AREA                        | INSTR NO.     | mR/HR            |                                  |           |       |
| MAIN CONTROL ROOM           | RE-3          | 0.04             | RADWASTE SUMP                    | RE-6      | 20.0  |
| MAIN CONTROL ROOM INTAKE    | RM-1705-16    | 0.05             | RADWASTE CHEM WST REC TANK       | RE-7      | 10.0  |
| RX BLDG OUTSIDE TIP RM      | RE-8          | OSH              | RADWASTE CORRIDOR                | RE-5      | 10.0  |
| RX BLDG ACCESS-SE           | RE-10         | OSH              | RADWASTE SHIPPING LOCK           | RE-9      | 3.0   |
| TURB BLDG COND PMP STAIRWAY | r RE-1        | 2.0              |                                  |           |       |
| TURBINE FRONT STANDARD      | RE-4          | 1.0              |                                  |           |       |
| FW HEATER STAIRWAY          | RE-2          | 4.0              | PILGRIM ***                      | 3:15      |       |

NORMAL

## AREA RADIATION

|                             |               | EFFL RAD MSL RAD<br>NORMAL NORMAL |                            |           |       |
|-----------------------------|---------------|-----------------------------------|----------------------------|-----------|-------|
| AREA (HI RANGE)             | INSTR NO.     | R/HR                              | AREA                       | INSTR NO. | mR/HR |
| DRYWELL A                   | RIT1001-606A  | 1.0                               | NEW FUEL RACKS             | RE-11     | 0.2   |
| DRYWELL B                   | RIT 1001-606B | 380.0                             | REFUEL FLR-NEW FUEL VAULT  | RE-12     | 0.5   |
| TORUS A                     | RIT1001-607A  | 1.0                               | REFUEL FLR-SPENT FUEL POOL | RE-14     | 10.0  |
| TORUS B                     | RIT1001-607B  | 40.0                              | REFUEL FLR-SHIELD          | RE-13     | 0.9   |
| AREA                        | INSTR NO.     | mR/HR                             |                            |           |       |
| MAIN CONTROL ROOM           | RE-3          | 0.04                              | RADWASTE SUMP              | RE-6      | 20.0  |
| MAIN CONTROL ROOM INTAKE    | RM-1705-16    | 0.05                              | RADWASTE CHEM WST REC TANK | RE-7      | 10.0  |
| RX BLDG OUTSIDE TIP RM      | RE-8          | OSH                               | RADWASTE CORRIDOR          | RE-5      | 10.0  |
| RX BLDG ACCESS-SE           | RE-10         | OSH                               | RADWASTE SHIPPING LOCK     | RE-9      | 3.0   |
| TURB BLDG COND PMP STAIRWAY | ( RE-1        | 2.0                               |                            |           |       |
| TURBINE FRONT STANDARD      | RE-4          | 1.0                               |                            |           |       |
| FW HEATER STAIRWAY          | RE-2          | 4.0                               | PILGRIM ***                | 3:30      |       |

NORMAL

### **AREA RADIATION**

|                            |               | EFFL RAD MSL RAI<br>NORMAL NORMAL | 11 1                       |           |       |
|----------------------------|---------------|-----------------------------------|----------------------------|-----------|-------|
| AREA (HI RANGE)            | INSTR NO.     | R/HR                              | AREA                       | INSTR NO. | mR/HR |
| DRYWELL A                  | RIT1001-606A  | 1.0                               | NEW FUEL RACKS             | RE-11     | 0.2   |
| DRYWELL B                  | RIT 1001-606B | 380.0                             | REFUEL FLR-NEW FUEL VAULT  | RE-12     | 0.5   |
| TORUS A                    | RIT1001-607A  | 1.0                               | REFUEL FLR-SPENT FUEL POOL | RE-14     | 10.0  |
| TORUS B                    | RIT1001-607B  | 40.0                              | REFUEL FLR-SHIELD          | RE-13     | 0.9   |
| AREA                       | INSTR NO.     | mR/HR                             |                            |           |       |
| MAIN CONTROL ROOM          | RE-3          | 0.04                              | RADWASTE SUMP              | RE-6      | 20.0  |
| MAIN CONTROL ROOM INTAKE   | RM-1705-16    | 0.05                              | RADWASTE CHEM WST REC TANK | RE-7      | 10.0  |
| RX BLDG OUTSIDE TIP RM     | RE-8          | OSH                               | RADWASTE CORRIDOR          | RE-5      | 10.0  |
| RX BLDG ACCESS-SE          | RE-10         | OSH                               | RADWASTE SHIPPING LOCK     | RE-9      | 3.0   |
| TURB BLDG COND PMP STAIRWA | Y RE-1        | 2.0                               |                            |           |       |
| TURBINE FRONT STANDARD     | RE-4          | 1.0                               |                            |           |       |
| FW HEATER STAIRWAY         | RE-2          | 4.0                               | PILGRIM ***                | 3:45      |       |

NORMAL

### **AREA RADIATION**

|                             |               |       | MSL RAD<br>NORMAL | AREA RAD<br>NORMAL         |           |       |
|-----------------------------|---------------|-------|-------------------|----------------------------|-----------|-------|
| AREA (HI RANGE)             | INSTR NO.     | R/HR  |                   | AREA                       | INSTR NO. | mR/HR |
| DRYWELL A                   | RIT1001-606A  | 1.0   |                   | NEW FUEL RACKS             | RE-11     | 0.2   |
| DRYWELL B                   | RIT 1001-606B | 380.0 |                   | REFUEL FLR-NEW FUEL VAULT  | RE-12     | 0.5   |
| TORUS A                     | RIT1001-607A  | 1.0   |                   | REFUEL FLR-SPENT FUEL POOL | RE-14     | 10.0  |
| TORUS B                     | RIT1001-607B  | 40.0  |                   | REFUEL FLR-SHIELD          | RE-13     | 0.9   |
| AREA                        | INSTR NO.     | mR/HR |                   |                            |           |       |
| MAIN CONTROL ROOM           | RE-3          | 0.04  |                   | RADWASTE SUMP              | RE-6      | 20.0  |
| MAIN CONTROL ROOM INTAKE    | RM-1705-16    | 0.05  |                   | RADWASTE CHEM WST REC TANK | ( RE-7    | 10.0  |
| RX BLDG OUTSIDE TIP RM      | RE-8          | OSH   |                   | RADWASTE CORRIDOR          | RE-5      | 10.0  |
| RX BLDG ACCESS-SE           | RE-10         | OSH   |                   | RADWASTE SHIPPING LOCK     | RE-9      | 3.0   |
| TURB BLDG COND PMP STAIRWAY | Y RE-1        | 2.0   |                   |                            |           |       |
| TURBINE FRONT STANDARD      | RE-4          | 1.0   |                   |                            |           |       |
| FW HEATER STAIRWAY          | RE-2          | 4.0   |                   | PILGRIM ***                | 4:0       | 0     |

NORMAL

## **AREA RADIATION**

|                             |               | EFFL RAD<br>NORMAL | MSL RAD<br>NORMAL | AREA RAD<br>NORMAL |              |           |       |
|-----------------------------|---------------|--------------------|-------------------|--------------------|--------------|-----------|-------|
| AREA (HI RANGE)             | INSTR NO.     | R/HR               |                   | AREA               |              | INSTR NO. | mR/HR |
| DRYWELL A                   | RIT1001-606A  | 1.0                |                   | NEW FUEL RACKS     |              | RE-11     | 0.2   |
| DRYWELL B                   | RIT 1001-606B | 380.0              |                   | REFUEL FLR-NEW     | FUEL VAULT   | RE-12     | 0.5   |
| TORUS A                     | RIT1001-607A  | 1.0                |                   | REFUEL FLR-SPEN    | T FUEL POOL  | RE-14     | 10.0  |
| TORUS B                     | RIT1001-607B  | 40.0               |                   | REFUEL FLR-SHIEL   | D            | RE-13     | 0.9   |
| AREA                        | INSTR NO.     | mR/HR              |                   |                    |              |           |       |
| MAIN CONTROL ROOM           | RE-3          | 0.04               |                   | RADWASTE SUMP      |              | RE-6      | 20.0  |
| MAIN CONTROL ROOM INTAKE    | RM-1705-16    | 0.05               |                   | RADWASTE CHEM      | WST REC TANK | RE-7      | 10.0  |
| RX BLDG OUTSIDE TIP RM      | RE-8          | OSH                |                   | RADWASTE CORRI     | DOR          | RE-5      | 10.0  |
| RX BLDG ACCESS-SE           | RE-10         | OSH                |                   | RADWASTE SHIPPII   | NG LOCK      | RE-9      | 3.0   |
| TURB BLDG COND PMP STAIRWAY | ′ RE-1        | 2.0                |                   |                    |              |           |       |
| TURBINE FRONT STANDARD      | RE-4          | 1.0                |                   |                    |              |           |       |
| FW HEATER STAIRWAY          | RE-2          | 4.0                |                   |                    | PILGRIM ***  |           | 4:15  |

NORMAL

**1999 Evaluated Exercise** 

### **AREA RADIATION**

|                             |               | EFFL RAD<br>NORMAL | MSL RAD<br>NORMAL | AREA RAD<br>NORMAL |                     |           |       |
|-----------------------------|---------------|--------------------|-------------------|--------------------|---------------------|-----------|-------|
| AREA (HI RANGE)             | INSTR NO.     | R/HR               |                   | AREA               |                     | INSTR NO. | mR/HR |
| DRYWELL A                   | RIT1001-606A  | 1.0                |                   | NEW FUEL           | RACKS               | RE-11     | 0.20  |
| DRYWELL B                   | RIT 1001-606B | 380.0              |                   | REFUEL FI          | R-NEW FUEL VAULT    | RE-12     | 0.50  |
| TORUS A                     | RIT1001-607A  | 1.0                |                   | REFUEL FI          | R-SPENT FUEL POOL   | RE-14     | 10.00 |
| TORUS B                     | RIT1001-607B  | 40.0               |                   | REFUEL FL          | .R-SHIELD           | RE-13     | 0.90  |
| AREA                        | INSTR NO.     | mR/HR              |                   |                    |                     |           |       |
| MAIN CONTROL ROOM           | RE-3          | 0.04               |                   | RADWAST            | E SUMP              | RE-6      | 20.0  |
| MAIN CONTROL ROOM INTAKE    | RM-1705-16    | 0.05               |                   | RADWAST            | E CHEM WST REC TANK | RE-7      | 10.0  |
| RX BLDG OUTSIDE TIP RM      | RE-8          | OSH                |                   | RADWAST            | E CORRIDOR          | RE-5      | 10.0  |
| RX BLDG ACCESS-SE           | RE-10         | OSH                |                   | RADWASTI           | E SHIPPING LOCK     | RE-9      | 3.0   |
| TURB BLDG COND PMP STAIRWAY | ( RE-1        | 2.0                |                   |                    |                     |           |       |
| TURBINE FRONT STANDARD      | RE-4          | 1.0                |                   |                    |                     |           |       |
| FW HEATER STAIRWAY          | RE-2          | 4.0                |                   |                    | PILGRIM ***         | 4:        | 30    |

NORMAL

### **AREA RADIATION**

|                            |               | EFFL RAD MSL RA<br>NORMAL NORMA |                            |           |       |
|----------------------------|---------------|---------------------------------|----------------------------|-----------|-------|
| AREA (HI RANGE)            | INSTR NO.     | R/HR                            | AREA                       | INSTR NO. | mR/HR |
| DRYWELL A                  | RIT1001-606A  | 1.0                             | NEW FUEL RACKS             | RE-11     | 0.2   |
| DRYWELL B                  | RIT 1001-606B | 380.0                           | REFUEL FLR-NEW FUEL VAULT  | RE-12     | 0.5   |
| TORUS A                    | RIT1001-607A  | 1.0                             | REFUEL FLR-SPENT FUEL POOL | RE-14     | 10.0  |
| TORUS B                    | RIT1001-607B  | 40.0                            | REFUEL FLR-SHIELD          | RE-13     | 0.9   |
| AREA                       | INSTR NO.     | mR/HR                           |                            |           |       |
| MAIN CONTROL ROOM          | RE-3          | 0.04                            | RADWASTE SUMP              | RE-6      | 20.0  |
| MAIN CONTROL ROOM INTAKE   | RM-1705-16    | 0.05                            | RADWASTE CHEM WST REC TAN  | K RE-7    | 10.0  |
| RX BLDG OUTSIDE TIP RM     | RE-8          | OSH                             | RADWASTE CORRIDOR          | RE-5      | 10.0  |
| RX BLDG ACCESS-SE          | RE-10         | OSH                             | RADWASTE SHIPPING LOCK     | RE-9      | 3.0   |
| TURB BLDG COND PMP STAIRWA | Y RE-1        | 2.0                             |                            |           |       |
| TURBINE FRONT STANDARD     | RE-4          | 1.0                             |                            |           |       |
| FW HEATER STAIRWAY         | RE-2          | 4.0                             | PILGRIM ***                | 4:45      |       |

NORMAL

### **AREA RADIATION**

|                            |               | EFFL RAD<br>NORMAL | MSL RAD<br>NORMAL | AREA RAD<br>NORMAL         |           |       |
|----------------------------|---------------|--------------------|-------------------|----------------------------|-----------|-------|
| AREA (HI RANGE)            | INSTR NO.     | R/HR               |                   | AREA                       | INSTR NO. | mR/HR |
| DRYWELL A                  | RIT1001-606A  | 1.0                |                   | NEW FUEL RACKS             | RE-11     | 0.2   |
| DRYWELL B                  | RIT 1001-606B | 380.0              |                   | REFUEL FLR-NEW FUEL VAULT  | RE-12     | 0.5   |
| TORUS A                    | RIT1001-607A  | 1.0                |                   | REFUEL FLR-SPENT FUEL POOL | RE-14     | 10.0  |
| TORUS B                    | RIT1001-607B  | 40.0               |                   | REFUEL FLR-SHIELD          | RE-13     | 0.9   |
| AREA                       | INSTR NO.     | mR/HR              |                   |                            |           |       |
| MAIN CONTROL ROOM          | RE-3          | 0.04               |                   | RADWASTE SUMP              | RE-6      | 20.0  |
| MAIN CONTROL ROOM INTAKE   | RM-1705-16    | 0.05               |                   | RADWASTE CHEM WST REC TANK | RE-7      | 10.0  |
| RX BLDG OUTSIDE TIP RM     | RE-8          | OSH                |                   | RADWASTE CORRIDOR          | RE-5      | 10.0  |
| RX BLDG ACCESS-SE          | RE-10         | OSH                |                   | RADWASTE SHIPPING LOCK     | RE-9      | 3.0   |
| TURB BLDG COND PMP STAIRWA | r RE-1        | 2.0                |                   |                            |           |       |
| TURBINE FRONT STANDARD     | RE-4          | 1.0                |                   |                            |           |       |
| FW HEATER STAIRWAY         | RE-2          | 4.0                |                   | PILGRIM ***                | 5:00      |       |

NORMAL

## **AREA RADIATION**

|                             |               | EFFL RAD MSL RAD<br>NORMAL NORMAL | AREA RAD<br>NORMAL         |           |       |
|-----------------------------|---------------|-----------------------------------|----------------------------|-----------|-------|
| AREA (HI RANGE)             | INSTR NO.     | R/HR                              | AREA                       | INSTR NO. | mR/HR |
| DRYWELL A                   | RIT1001-606A  | 1.0                               | NEW FUEL RACKS             | RE-11     | 0.2   |
| DRYWELL B                   | RIT 1001-606B | 380.0                             | REFUEL FLR-NEW FUEL VAULT  | RE-12     | 0.5   |
| TORUS A                     | RIT1001-607A  | 1.0                               | REFUEL FLR-SPENT FUEL POOL | RE-14     | 10.0  |
| TORUS B                     | RIT1001-607B  | 40.0                              | REFUEL FLR-SHIELD          | RE-13     | 0.9   |
| AREA                        | INSTR NO.     | mR/HR                             |                            |           |       |
| MAIN CONTROL ROOM           | RE-3          | 0.04                              | RADWASTE SUMP              | RE-6      | 20.0  |
| MAIN CONTROL ROOM INTAKE    | RM-1705-16    | 0.05                              | RADWASTE CHEM WST REC TANK | RE-7      | 10.0  |
| RX BLDG OUTSIDE TIP RM      | RE-8          | OSH                               | RADWASTE CORRIDOR          | RE-5      | 10.0  |
| RX BLDG ACCESS-SE           | RE-10         | OSH                               | RADWASTE SHIPPING LOCK     | RE-9      | 3.0   |
| TURB BLDG COND PMP STAIRWAY | Y RE-1        | 2.0                               |                            |           |       |
| TURBINE FRONT STANDARD      | RE-4          | 1.0                               |                            |           |       |
| FW HEATER STAIRWAY          | RE-2          | 4.0                               | PILGRIM ***                | 5:15      |       |

### **AREA RADIATION**

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# NORMAL

1999 Evaluated Exercise

|                             |               | EFFL RAD | MSL RAD | AREA RAD                   |           |       |
|-----------------------------|---------------|----------|---------|----------------------------|-----------|-------|
|                             |               | NORMAL   | NORMAL  | NORMAL                     |           |       |
| AREA (HI RANGE)             | INSTR NO.     | R/HR     |         | AREA                       | INSTR NO. | mR/HR |
| DRYWELL A                   | RIT1001-606A  | 1.0      |         | NEW FUEL RACKS             | RE-11     | 0.2   |
| DRYWELL B                   | RIT 1001-606B | 380.0    |         | REFUEL FLR-NEW FUEL VAULT  | RE-12     | 0.5   |
| TORUS A                     | RIT1001-607A  | 1.0      |         | REFUEL FLR-SPENT FUEL POOL | RE-14     | 10.0  |
| TORUS B                     | RIT1001-607B  | 40.0     |         | REFUEL FLR-SHIELD          | RE-13     | 0.9   |
| AREA                        | INSTR NO.     | mR/HR    |         |                            |           |       |
| MAIN CONTROL ROOM           | RE-3          | 0.04     |         | RADWASTE SUMP              | RE-6      | 20.0  |
| MAIN CONTROL ROOM INTAKE    | RM-1705-16    | 0.05     |         | RADWASTE CHEM WST REC TANK | RE-7      | 10.0  |
| RX BLDG OUTSIDE TIP RM      | RE-8          | OSH      |         | RADWASTE CORRIDOR          | RE-5      | 10.0  |
| RX BLDG ACCESS-SE           | RE-10         | OSH      |         | RADWASTE SHIPPING LOCK     | RE-9      | 3.0   |
| TURB BLDG COND PMP STAIRWAY | RE-1          | 2.0      |         |                            |           |       |
| TURBINE FRONT STANDARD      | RE-4          | 1.0      |         |                            |           |       |
| FW HEATER STAIRWAY          | RE-2          | 4.0      |         | PILGRIM                    |           | 5:30  |

This is a Drill

## **Dose Assessment**

### Method: Monitored Release

Release Path: <RCS>-<RB>-<SBGT>-<ENV>

Core Damage: 10% Gap

Release Height: Elevated

Wind Direction (from): 115°

Monitor: Main Stack Low Range

Time: 11:21 Date: 9/20/99

PRF: 0.004

Time After S/D (hours): 3:00

Release Duration (hours): 5:55

Vent Flow Rate (SCFM): 24000

Reading (CPS): 3.50E+05

| Distance | External | External | Inhalation | •        | Total Dose | Thyroid  |
|----------|----------|----------|------------|----------|------------|----------|
| (miles)  | (mR/hr)  | (Rem)    | (Rem)      | (Rem)    | (Rem)      | (Rem)    |
| S.B.     | 4.12E-06 | 1.40E-08 | 6.34E-09   | 2.73E-09 | 2.30E-08   | 1.30E-07 |
| 0.5      | 1.80E+00 | 6.08E-03 | 2.76E-03   | 1.19E-03 | 1.00E-02   | 5.65E-02 |
| 1.0      | 5.96E+00 | 2.02E-02 | 9.16E-03   | 3.95E-03 | 3.33E-02   | 1.88E-01 |
| 1.5      | 5.46E+00 | 1.85E-02 | 8.39E-03   | 3.62E-03 | 3.05E-02   | 1.72E-01 |
| 2.0      | 4.57E+00 | 1.55E-02 | 7.03E-03   | 3.03E-03 | 2.55E-02   | 1.44E-01 |
| 2.5      | 3.88E+00 | 1.31E-02 | 5.96E-03   | 2.58E-03 | 2.17E-02   | 1.22E-01 |
| 3.0      | 3.36E+00 | 1.14E-02 | 5.16E-03   | 2.23E-03 | 1.87E-02   | 1.06E-01 |
| 3.5      | 2:95E+00 | 9:98E-03 | 4:53E-03   | 1:95E-03 | 1:65E-02   | 9.27E-02 |
| 4.0      | 2.62E+00 | 8.87E-03 | 4.03E-03   | 1.74E-03 | 1.46E-02   | 8.25E-02 |
| 4.5      | 2.36E+00 | 7.97E-03 | 3.62E-03   | 1.56E-03 | 1.32E-02   | 7.41E-02 |
| 5.0      | 2.13E+00 | 7.23E-03 | 3.28E-03   | 1.42E-03 | 1.19E-02   | 6.71E-02 |
| 5.5      | 1.95E+00 | 6.59E-03 | 2.99E-03   | 1.29E-03 | 1.09E-02   | 6.12E-02 |
| 6.0      | 1.78E+00 | 6.03E-03 | 2.74E-03   | 1.18E-03 | 9.95E-03   | 5.61E-02 |
| 6.5      | 1.64E+00 | 5.54E-03 | 2.52E-03   | 1.09E-03 | 9.15E-03   | 5.15E-02 |
| 7.0      | 1.51E+00 | 5.11E-03 | 2.32E-03   | 1.00E-03 | 8.43E-03   | 4.75E-02 |
| 7.5      | 1.38E+00 | 4.69E-03 | 2.13E-03   | 9.18E-04 | 7.73E-03   | 4.36E-02 |
| 8.0      | 1.28E+00 | 4.33E-03 | 1.97E-03   | 8.49E-04 | 7.15E-03   | 4.02E-02 |
| 8.5      | 1.18E+00 | 4.01E-03 | 1.82E-03   | 7.86E-04 | 6.62E-03   | 3.73E-02 |
| 9.0      | 1.10E+00 | 3.72E-03 | 1.69E-03   | 7.29E-04 | 6.14E-03   | 3.46E-02 |
| 9.5      | 1.02E+00 | 3.47E-03 | 1.57E-03   | 6.79E-04 | 5.72E-03   | 3.22E-02 |
| 10.0     | 9.55E-01 | 3.23E-03 | 1.47E-03   | 6.33E-04 | 5.33E-03   | 3.00E-02 |

Whole Body PAGs

Thyroid PAGs

## **Dose Assessment**

# **Protective Action Recommendations**

| Time: 11:2                                     | 21 Dat     | e: 9/2      | 20/99  |       | r      |                    | Suba    | ireas ( | to be | Evacu          | lated     | [              |                   |
|------------------------------------------------|------------|-------------|--------|-------|--------|--------------------|---------|---------|-------|----------------|-----------|----------------|-------------------|
| <u>Assessme</u><br>Monitored                   |            |             |        |       |        | /                  |         | 10      | 2     |                |           |                |                   |
| Conditions<br>1) Off Sea<br>2) Midwee          | son 3)     | Mido<br>Goo | -      |       |        | 5                  | 9       | 15      | 4     |                |           |                |                   |
| Stability C                                    | ,          |             |        |       |        |                    | 8       |         | J     | 0              |           |                | :                 |
| Wind Dired                                     |            | om):        | 1159   | 5     |        | $\sum$             | /       | 7       |       | 7              |           |                | 12                |
| Wind Spee                                      |            |             | 9.0    | _     |        | -+                 | []      |         | 3     | $\overline{1}$ |           |                |                   |
| Release D                                      |            |             | 5:55   |       |        |                    |         | 5       | م -   |                | $\neg$    |                |                   |
| <b></b>                                        |            |             |        |       |        | $\mathbf{r}$       |         | 6 \     | X     | 2              |           |                |                   |
| General<br>Evacuate<br>1) 1 to 5<br>2) 5 to 25 | Rem W      | :<br>hole   | Body   |       |        | $\left\{ \right\}$ | 11      |         | ſ     | 5              | 5         | >              |                   |
| Evacuate                                       |            | ,           |        |       |        |                    |         |         | 7     |                |           |                |                   |
| 1) >5 Rei<br>2) >25 Rei                        |            |             | dy     |       |        |                    |         |         | L     |                |           |                |                   |
| Evac/Shel                                      | ter of:    | 1           | 2      | 3     | 4      | 5                  | 6       | 7       | 8     | 9              | 10        | 11             | 12                |
| Evacuatio                                      | n of:      | 1           | 2      | 3     | 4      | 5                  | 6       | 7       | 8     | 9              | 10        | 11             | 12                |
| Group R                                        | elease     | Rat         | es (C  | i/sec | :)     |                    |         |         |       |                |           |                |                   |
| Noble Gas                                      | es: 1.1    | 4E+(        | 01     | H     | aloger | is: 3.             | 82E-0   | 2       | Pa    | articula       | ates:     | 6.71           | E-03              |
| Affected                                       | Suba       | rea D       | Dose   | Table | es     |                    |         |         |       | <u></u>        |           |                |                   |
|                                                | <b></b>    | ffect       | ted Su | barea | as     | ([                 | Dose in | Rem)    | Who   | le Bo          | <u>dy</u> | Thyr           | oid               |
| Ring 1     1, 12       (0-2 miles)             |            |             |        |       |        |                    |         |         |       |                |           |                |                   |
| (0-2 miles)                                    | 1, 12      | 2           |        |       |        | No                 |         |         |       |                | _         | 1.88E<br>1.56E | -01               |
| (0-2 miles)<br><b>Ring 2</b><br>(2-5 miles)    | 1, 12<br>3 | 2           |        |       |        | _                  | Shel    |         | 2.9   |                | 2         |                | -01<br>-01<br>-01 |

No Protection:

Sheltered:

1.19E-02

1.04E-02

6.71E-02

5.58E-02

**Ring 3** 6, 7, 8, 9 (5-10 miles)

## **Dose Assessment**

#### Method: Monitored Release

Time: 11:22 Date: 9/20/99

Time After S/D (hours): 3:15

Release Duration (hours): 5:55

Vent Flow Rate (SCFM): 24000

Release Path: <RCS>-<RB>-<SBGT>-<ENV>

Core Damage: 10% Gap

**Release Height: Elevated** 

Wind Direction (from): 115°

Monitor: Main Stack Low Range

Reading (CPS): 5.00E+05

| Distance | External | External | Inhalation | Deposition | Total Dose | Thyroid  |
|----------|----------|----------|------------|------------|------------|----------|
| (miles)  | (mR/hr)  | (Rem)    | (Rem)      | (Rem)      | (Rem)      | (Rem)    |
| S.B.     | 6.44E-06 | 2.20E-08 | 1.05E-08   | 4.48E-09   | 3.69E-08   | 2.14E-07 |
| 0.5      | 2.80E+00 | 9.57E-03 | 4.56E-03   | 1.95E-03   | 1.61E-02   | 9.32E-02 |
| 1.0      | 9.31E+00 | 3.18E-02 | 1.51E-02   | 6.48E-03   | 5.34E-02   | 3.09E-01 |
| 1.5      | 8.53E+00 | 2.91E-02 | 1.39E-02   | 5.93E-03   | 4.89E-02   | 2.83E-01 |
| 2.0      | 7.14E+00 | 2.44E-02 | 1.16E-02   | 4.97E-03   | 4.10E-02   | 2.37E-01 |
| 2.5      | 6.06E+00 | 2.07E-02 | 9.85E-03   | 4.22E-03   | 3.48E-02   | 2.02E-01 |
| 3.0      | 5.24E+00 | 1.79E-02 | 8.52E-03   | 3.65E-03   | 3.01E-02   | 1.74E-01 |
| 3.5      | 4.60E+00 | 1.57E-02 | 7.48E-03   | 3.20E-03   | 2.64E-02   | 1.53E-01 |
| 4.0      | 4.09E+00 | 1.40E-02 | 6.65E-03   | 2.85E-03   | 2.35E-02   | 1.36E-01 |
| 4.5      | 3.68E+00 | 1.26E-02 | 5.98E-03   | 2.56E-03   | 2.11E-02   | 1.22E-01 |
| 5.0      | 3.33E+00 | 1.14E-02 | 5.42E-03   | 2.32E-03   | 1.91E-02   | 1.11E-01 |
| 5.5      | 3.04E+00 | 1.04E-02 | 4.94E-03   | 2.12E-03   | 1.74E-02   | 1.01E-01 |
| 6.0      | 2.78E+00 | 9.50E-03 | 4.52E-03   | 1.94E-03   | 1.60E-02   | 9.25E-02 |
| 6.5      | 2.56E+00 | 8.73E-03 | 4.16E-03   | 1.78E-03   | 1.47E-02   | 8.50E-02 |
| 7.0      | 2.36E+00 | 8.04E-03 | 3.83E-03   | 1.64E-03   | 1.35E-02   | 7.83E-02 |
| 7.5      | 2.16E+00 | 7.38E-03 | 3.51E-03   | 1.51E-03   | 1.24E-02   | 7.19E-02 |
| 8.0      | 2.00E+00 | 6.82E-03 | 3.25E-03   | 1.39E-03   | 1.15E-02   | 6.64E-02 |
| 8.5      | 1.85E+00 | 6.31E-03 | 3.01E-03   | 1.29E-03   | 1.06E-02   | 6.15E-02 |
| 9.0      | 1.72E+00 | 5.86E-03 | 2.79E-03   | 1.20E-03   | 9.85E-03   | 5.71E-02 |
| 9.5      | 1.60E+00 | 5.46E-03 | 2.60E-03   | 1.11E-03   | 9.17E-03   | 5.32E-02 |
| 10.0     | 1.49E+00 | 5.09E-03 | 2.42E-03   | 1.04E-03   | 8.55E-03   | 4.96E-02 |

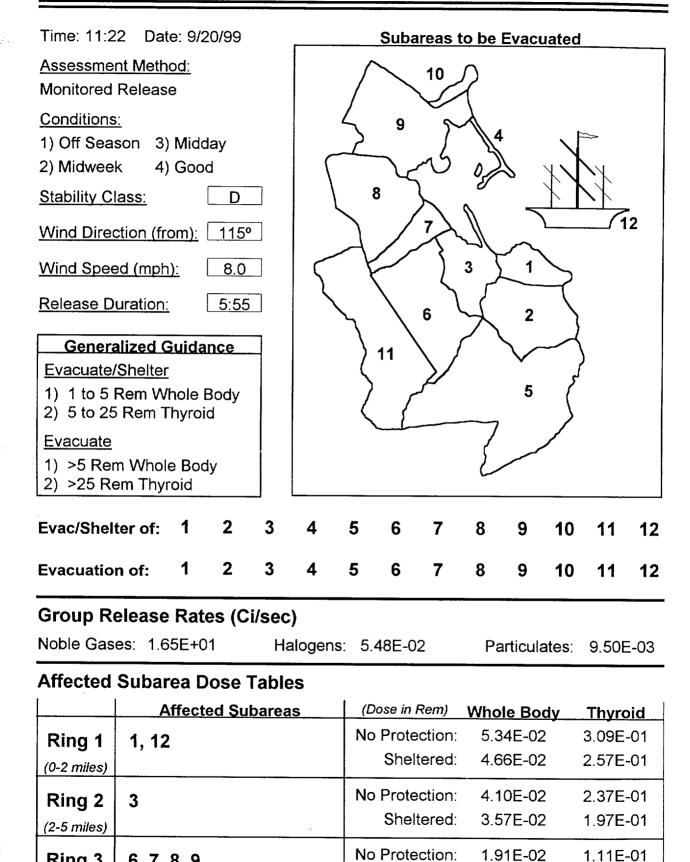
Whole Body PAGs

**Thyroid PAGs** 

**Dose Assessment** 

PRF: 0.004

## **Protective Action Recommendations**



Sheltered:

1.67E-02

9.21E-02

Ring 3 (5-10 miles) 6, 7, 8, 9

# Reactor Coolant (µCi/ml)

|                        | 00:00    | 00:15    | 00:30    | 00:45    | 01:00    | 01:15    | 01:30    | 01:45    | 02:00    | 02:15    | 02:30    | 02:45    |
|------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Kr-85m                 | 5.82E-06 | 5.73E+00 | 8.26E+00 | 1.05E+01 | 1.23E+01 | 1.16E+01 | 1.11E+01 | 1.00E+01 | 9.09E+00 | 8.21E+00 | 7.35E+00 | 6.98E+00 |
| Kr-85                  | 4.57E-07 | 4.55E-01 | 6.81E-01 | 8,99E-01 | 1.09E+00 | 1.07E+00 | 1.07E+00 | 1.00E+00 | 9.46E-01 | 8.88E-01 | 8.26E-01 | 8.16E-01 |
| Kr-87                  | 5.93E-06 | 5.64E+00 | 7.37E+00 | 8.49E+00 | 9.01E+00 | 7.71E+00 | 6.69E+00 | 5.50E+00 | 4.52E+00 | 3.70E+00 | 3.00E+00 | 2.59E+00 |
| Kr-88                  | 1.25E-05 | 1.22E+01 | 1.73E+01 | 2.14E+01 | 2.45E+01 | 2.26E+01 | 2.12E+01 | 1.87E+01 | 1.66E+01 | 1.47E+01 | 1.28E+01 | 1.19E+01 |
| Xe-133                 | 2.53E-04 | 2.52E+02 | 3.77E+02 | 4.97E+02 | 6.04E+02 | 5.91E+02 | 5.87E+02 | 5.52E+02 | 5.19E+02 | 4.87E+02 | 4.52E+02 | 4.46E+02 |
| Xe-135                 | 2.18E-05 | 2.16E+01 | 3.17E+01 | 4.11E+01 | 4.90E+01 | 4.72E+01 | 4.60E+01 | 4.25E+01 | 3.93E+01 | 3.62E+01 | 3.30E+01 | 3.20E+01 |
| <b>Total Noble Gas</b> | 3.00E-04 | 2.98E+02 | 4.42E+02 | 5.79E+02 | 7.00E+02 | 6.82E+02 | 6.73E+02 | 6.30E+02 | 5.90E+02 | 5.50E+02 | 5.09E+02 | 5.01E+02 |
|                        |          |          |          |          |          |          |          |          |          |          |          | i r      |
| l-131                  | 1.68E-04 | 1.68E+02 | 2.51E+02 | 3.31E+02 | 4.02E+02 | 3.96E+02 | 3.91E+02 | 3.68E+02 | 3.47E+02 | 3.25E+02 | 3.02E+02 | 2.98E+02 |
| <u>l-132</u>           | 2.14E-05 | 2.08E+01 | 2.89E+01 | 3.53E+01 | 3.99E+01 | 3.64E+01 | 3.34E+01 | 2.92E+01 | 2.55E+01 | 2.22E+01 | 1.92E+01 | 1.76E+01 |
| I-133                  | 1.15E-04 | 1.15E+02 | 1.70E+02 | 2.23E+02 | 2.69E+02 | 2.62E+02 | 2.57E+02 | 2.41E+02 | 2.25E+02 | 2.09E+02 | 1.93E+02 | 1.89E+02 |
| I-134                  | 2.61E-05 | 2.44E+01 | 3.00E+01 | 3.24E+01 | 3.24E+01 | 2.62E+01 | 2.13E+01 | 1.64E+01 | 1.27E+01 | 9.79E+00 | 7.48E+00 | 6.06E+00 |
| I-135                  | 6.13E-05 | 6.05E+01 | 8.83E+01 | 1.13E+02 | 1.35E+02 | 1.29E+02 | 1.24E+02 | 1.14E+02 | 1.05E+02 | 9.58E+01 | 8.69E+01 | 8.36E+01 |
| Total Halogen          | 3.92E-04 | 3.88E+02 | 5.68E+02 | 7.35E+02 | 8.78E+02 | 8.50E+02 | 8.28E+02 | 7.69E+02 | 7.14E+02 | 6.62E+02 | 6.09E+02 | 5.94E+02 |
|                        |          |          |          |          |          |          |          |          |          |          |          |          |
| Cs-134                 | 1.07E-05 | 1.06E+01 | 1.59E+01 | 2.10E+01 | 2.56E+01 | 2.52E+01 | 2.49E+01 | 2.35E+01 | 2.21E+01 | 2.08E+01 | 1.93E+01 | 1.91E+01 |
| Cs-137                 | 6.59E-06 | 6.56E+00 | 9.83E+00 | 1.30E+01 | 1.58E+01 | 1.56E+01 | 1.54E+01 | 1.45E+01 | 1.37E+01 | 1.28E+01 | 1.19E+01 | 1.18E+01 |
| Cs-138                 | 9.69E-05 | 8.67E+01 | 9.41E+01 | 8.99E+01 | 7.93E+01 | 5.65E+01 | 4.05E+01 | 2.76E+01 | 1.89E+01 | 1.28E+01 | 8.64E+00 | 6.18E+00 |
| Total Particulate      | 1.14E-04 | 1.04E+02 | 1.20E+02 | 1.24E+02 | 1.21E+02 | 9.73E+01 | 8.08E+01 | 6.56E+01 | 5.46E+01 | 4.64E+01 | 3.99E+01 | 3.70E+01 |

# Reactor Coulant (µCi/ml)

| · · · · · · · · · · · · · · · · · · · | 03:00    | 03:15    | 03:30    | 03:45    | 04:00    | 04:15    | 04:30    | 04:45    | 05:00    | 05:15    | 05:30    |
|---------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Kr-85m                                | 6.58E+00 | 5.78E+00 | 5.13E+00 | 4.77E+00 | 4.43E+00 | 4.26E+00 | 4.10E+00 | 3.94E+00 | 3.79E+00 | 3.65E+00 | 3.51E+00 |
| Kr-85                                 | 7.99E-01 | 7.31E-01 | 6.73E-01 | 6.51E-01 | 6.28E-01 |
| Kr-87                                 | 2.21E+00 | 1.76E+00 | 1.42E+00 | 1.20E+00 | 1.01E+00 | 8.78E-01 | 7.66E-01 | 6.68E-01 | 5.83E-01 | 5.09E-01 | 4.44E-01 |
| Kr-88                                 | 1.10E+01 | 9.46E+00 | 8.20E+00 | 7.45E+00 | 6.77E+00 | 6.37E+00 | 5.99E+00 | 5.64E+00 | 5.30E+00 | 4.99E+00 | 4.69E+00 |
| Xe-133                                | 4.36E+02 | 3.98E+02 | 3.67E+02 | 3.54E+02 | 3.41E+02 | 3.40E+02 | 3.40E+02 | 3.39E+02 | 3.39E+02 | 3.39E+02 | 3.38E+02 |
| Xe-135                                | 3.08E+01 | 2.76E+01 | 2.50E+01 | 2.37E+01 | 2.24E+01 | 2.20E+01 | 2.16E+01 | 2.12E+01 | 2.08E+01 | 2.04E+01 | 2.00E+01 |
| <b>Total Noble Gas</b>                | 4.88E+02 | 4.44E+02 | 4.07E+02 | 3.91E+02 | 3.76E+02 | 3.74E+02 | 3.73E+02 | 3.71E+02 | 3.70E+02 | 3.69E+02 | 3.67E+02 |
|                                       |          |          |          |          |          |          |          |          |          |          | • •      |
| l-131                                 | 2.92E+02 | 2.66E+02 | 2.45E+02 | 2.37E+02 | 2.28E+02 | 2.28E+02 | 2.28E+02 | 2.28E+02 | 2.27E+02 | 2.27E+02 | 2.27E+02 |
| I-132                                 | 1.59E+01 | 1.35E+01 | 1.16E+01 | 1.04E+01 | 9.27E+00 | 8.60E+00 | 7.97E+00 | 7.39E+00 | 6.86E+00 | 6.36E+00 | 5.90E+00 |
| <u>l-133</u>                          | 1.84E+02 | 1.66E+02 | 1.52E+02 | 1.46E+02 | 1.39E+02 | 1.38E+02 | 1.37E+02 | 1.36E+02 | 1.35E+02 | 1.34E+02 | 1.33E+02 |
| <u>l-134</u>                          | 4.87E+00 | 3.66E+00 | 2.77E+00 | 2.19E+00 | 1.74E+00 | 1.43E+00 | 1.17E+00 | 9.60E-01 | 7.88E-01 | 6.47E-01 | 5.31E-01 |
| I-135                                 | 7.97E+01 | 7.10E+01 | 6.37E+01 | 6.00E+01 | 5.64E+01 | 5.49E+01 | 5.35E+01 | 5.21E+01 | 5.08E+01 | 4.95E+01 | 4.82E+01 |
| Total Halogen                         | 5.76E+02 | 5.21E+02 | 4.76E+02 | 4.55E+02 | 4.35E+02 | 4.31E+02 | 4.28E+02 | 4.24E+02 | 4.21E+02 | 4.18E+02 | 4.14E+02 |
|                                       |          |          |          |          |          |          |          | ·        | ·        | '        | I        |
| Cs-134                                | 1.87E+01 | 1.71E+01 | 1.57E+01 | 1.52E+01 | 1.47E+01 |
| Cs-137                                | 1.15E+01 | 1.05E+01 | 9.72E+00 | 9.39E+00 | 9.06E+00 |
| Cs-138                                | 4.38E+00 | 2.90E+00 | 1.94E+00 | 1.36E+00 | 9.47E-01 | 6.86E-01 | 4.97E-01 | 3.60E-01 | 2.61E-01 | 1.89E-01 | 1.37E-01 |
| Total Particulate                     | 3.46E+01 | 3.05E+01 | 2.74E+01 | 2.60E+01 | 2.47E+01 | 2.44E+01 | 2.42E+01 | 2.41E+01 | 2.40E+01 | 2.39E+01 | 2.39E+01 |

# <u>Torus Ligաd (µCi/ml)</u>

|                        | 00:00      | 00:15    | 00:30    | 00:45    | 01:00    | 01:15    | 01:30    | 01:45    | 02:00    | 02:15    | 02:30    | 02:45    |
|------------------------|------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Kr-85m                 | 0.00E+00   | 6.44E-04 | 1.21E-03 | 4.77E-03 | 1.52E-02 | 1.19E-02 | 1.35E-02 | 3.93E-02 | 5.38E-02 | 6.72E-02 | 8.04E-02 | 7.99E-02 |
| Kr-85                  | 0.00E+00   | 5.11E-05 | 1.00E-04 | 4.09E-04 | 1.36E-03 | 1.10E-03 | 1.30E-03 | 3.93E-03 | 5.60E-03 | 7.28E-03 | 9.05E-03 | 9.34E-03 |
| Kr-87                  | 0.00E+00   | 6.34E-04 | 1.09E-03 | 3.86E-03 | 1.12E-02 | 7.91E-03 | 8.14E-03 | 2.15E-02 | 2.68E-02 | 3.03E-02 | 3.29E-02 | 2.96E-02 |
| Kr-88                  | 0.00E+00   | 1.38E-03 | 2.54E-03 | 9.74E-03 | 3.04E-02 | 2.32E-02 | 2.57E-02 | 7.34E-02 | 9.84E-02 | 1.20E-01 | 1.41E-01 | 1.37E-01 |
| Xe-133                 | 0.00E+00   | 2.83E-02 | 5.55E-02 | 2.26E-01 | 7.49E-01 | 6.07E-01 | 7.14E-01 | 2.16E+00 | 3.08E+00 | 3.99E+00 | 4.95E+00 | 5.11E+00 |
| Xe-135                 | 0.00E+00   | 2.43E-03 | 4.67E-03 | 1.87E-02 | 6.08E-02 | 4.84E-02 | 5.60E-02 | 1.67E-01 | 2.33E-01 | 2.97E-01 | 3.62E-01 | 3.66E-01 |
| <b>Total Noble Gas</b> | 0.00E+00   | 3.35E-02 | 6.51E-02 | 2.64E-01 | 8.68E-01 | 7.00E-01 | 8.19E-01 | 2.47E+00 | 3.49E+00 | 4.51E+00 | 5.58E+00 | 5.73E+00 |
|                        | <b>,</b> , |          |          |          |          |          |          |          |          |          |          |          |
| I-131                  | 0.00E+00   | 3.77E-02 | 7.39E-02 | 3.01E-01 | 9.98E-01 | 1.34E+00 | 1.59E+00 | 2.88E+00 | 4.11E+00 | 5.33E+00 | 6.61E+00 | 6.82E+00 |
| I-132                  | 0.00E+00   | 4.67E-03 | 8.50E-03 | 3.22E-02 | 9.89E-02 | 1.24E-01 | 1.36E-01 | 2.29E-01 | 3.02E-01 | 3.64E-01 | 4.20E-01 | 4.02E-01 |
| I-133                  | 0.00E+00   | 2.57E-02 | 5.01E-02 | 2.03E-01 | 6.66E-01 | 8.91E-01 | 1.04E+00 | 1.88E+00 | 2.66E+00 | 3.43E+00 | 4.23E+00 | 4.33E+00 |
| I-134                  | 0.00E+00   | 5.48E-03 | 8.82E-03 | 2.95E-02 | 8.04E-02 | 8.89E-02 | 8.63E-02 | 1.29E-01 | 1.51E-01 | 1.60E-01 | 1.64E-01 | 1.39E-01 |
| I-135                  | 0.00E+00   | 1.36E-02 | 2.60E-02 | 1.03E-01 | 3.34E-01 | 4.38E-01 | 5.05E-01 | 8.94E-01 | 1.24E+00 | 1.57E+00 | 1.90E+00 | 1.91E+00 |
| Total Halogen          | 0.00E+00   | 8.72E-02 | 1.67E-01 | 6.68E-01 | 2.18E+00 | 2.88E+00 | 3.36E+00 | 6.02E+00 | 8.46E+00 | 1.08E+01 | 1.33E+01 | 1.36E+01 |
|                        |            | ·····    |          | ····     |          |          |          |          |          | '        |          | I        |
| Cs-134                 | 0.00E+00   | 2.39E-03 | 4.69E-03 | 1.91E-02 | 6.34E-02 | 8.55E-02 | 1.01E-01 | 1.84E-01 | 2.62E-01 | 3.40E-01 | 4.23E-01 | 4.37E-01 |
| Cs-137                 | 0.00E+00   | 1.48E-03 | 2.89E-03 | 1.18E-02 | 3.92E-02 | 5.28E-02 | 6.24E-02 | 1.14E-01 | 1.62E-01 | 2.10E-01 | 2.61E-01 | 2.70E-01 |
| <u>Cs-138</u>          | 0.00E+00   | 1.95E-02 | 2.77E-02 | 8.18E-02 | 1.97E-01 | 1.92E-01 | 1.64E-01 | 2.16E-01 | 2.23E-01 | 2.10E-01 | 1.89E-01 | 1.41E-01 |
| Total Particulate      | 0.00E+00   | 2.34E-02 | 3.53E-02 | 1.13E-01 | 2.99E-01 | 3.30E-01 | 3.28E-01 | 5.14E-01 | 6.47E-01 | 7.60E-01 | 8.73E-01 | 8.48E-01 |

# Torus Liquid (µCi/ml)

|                   | 03:00    | 03:15    | 03:30    | 03:45    | 04:00    | 04:15    | 04:30    | 04:45    | 05:00    | 05:15    | 05:30    |
|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Kr-85m            | 8.09E-02 | 8.56E-02 | 8.99E-02 | 8.65E-02 | 6.93E-02 | 6.67E-02 | 6.42E-02 | 6.17E-02 | 5.94E-02 | 5.71E-02 | 5.50E-02 |
| Kr-85             | 9.83E-03 | 1.08E-02 | 1.18E-02 | 1.18E-02 | 9.83E-03 |
| Kr-87             | 2.72E-02 | 2.61E-02 | 2.48E-02 | 2.17E-02 | 1.58E-02 | 1.37E-02 | 1.20E-02 | 1.05E-02 | 9.13E-03 | 7.97E-03 | 6.95E-03 |
| Kr-88             | 1.35E-01 | 1.40E-01 | 1.44E-01 | 1.35E-01 | 1.06E-01 | 9.97E-02 | 9.38E-02 | 8.83E-02 | 8.30E-02 | 7.81E-02 | 7.35E-02 |
| Xe-133            | 5.37E+00 | 5.90E+00 | 6.42E+00 | 6.41E+00 | 5.34E+00 | 5.33E+00 | 5.32E+00 | 5.32E+00 | 5.31E+00 | 5.30E+00 | 5.29E+00 |
| Xe-135            | 3.79E-01 | 4.09E-01 | 4.37E-01 | 4.29E-01 | 3.51E-01 | 3.44E-01 | 3.38E-01 | 3.31E-01 | 3.25E-01 | 3.19E-01 | 3.13E-01 |
| Total Noble Gas   | 6.00E+00 | 6.57E+00 | 7.13E+00 | 7.10E+00 | 5.89E+00 | 5.86E+00 | 5.84E+00 | 5.82E+00 | 5.80E+00 | 5.77E+00 | 5.75E+00 |
|                   |          |          |          |          |          |          |          |          |          |          | 1        |
| I-131             | 7.18E+00 | 7.89E+00 | 8.60E+00 | 8.59E+00 | 7.15E+00 | 7.14E+00 | 7.14E+00 | 7.13E+00 | 7.13E+00 | 7.12E+00 | 7.11E+00 |
| <u>l-132</u>      | 3.92E-01 | 4.00E-01 | 4.05E-01 | 3.76E-01 | 2.90E-01 | 2.69E-01 | 2.50E-01 | 2.32E-01 | 2.15E-01 | 1.99E-01 | 1.85E-01 |
| I-133             | 4.52E+00 | 4.93E+00 | 5.33E+00 | 5.29E+00 | 4.37E+00 | 4.33E+00 | 4.30E+00 | 4.26E+00 | 4.23E+00 | 4.19E+00 | 4.16E+00 |
| <u>l-134</u>      | 1.20E-01 | 1.08E-01 | 9.69E-02 | 7.95E-02 | 5.44E-02 | 4.47E-02 | 3.66E-02 | 3.01E-02 | 2.47E-02 | 2.03E-02 | 1.66E-02 |
| <u>l-135</u>      | 1.96E+00 | 2.10E+00 | 2.23E+00 | 2.18E+00 | 1.77E+00 | 1.72E+00 | 1.68E+00 | 1.63E+00 | 1.59E+00 | 1.55E+00 | 1.51E+00 |
| Total Halogen     | 1.42E+01 | 1.54E+01 | 1.67E+01 | 1.65E+01 | 1.36E+01 | 1.35E+01 | 1.34E+01 | 1.33E+01 | 1.32E+01 | 1.31E+01 | 1.30E+01 |
|                   |          |          |          |          |          |          |          |          |          | I        | ,        |
| Cs-134            | 4.60E-01 | 5.06E-01 | 5.52E-01 | 5.52E-01 | 4.60E-01 |
| <u>Cs-137</u>     | 2.84E-01 | 3.12E-01 | 3.41E-01 | 3.41E-01 | 2.84E-01 |
| Cs-138            | 1.08E-01 | 8.59E-02 | 6.79E-02 | 4.92E-02 | 2.97E-02 | 2.15E-02 | 1.56E-02 | 1.13E-02 | 8.16E-03 | 5.91E-03 | 4.28E-03 |
| Total Particulate | 8.51E-01 | 9.04E-01 | 9.60E-01 | 9.41E-01 | 7.73E-01 | 7.65E-01 | 7.59E-01 | 7.55E-01 | 7.52E-01 | 7.49E-01 | 7.48E-01 |

# Torus Atmosµnere (µCi/cc)

|                   | 00:00    | 00:15    | 00:30    | 00:45    | 01:00    | 01:15    | 01:30    | 01:45    | 02:00    | 02:15    | 02:30    | 02:45    |
|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Kr-85m            | 0.00E+00 | 9.64E-04 | 1.82E-03 | 7.14E-03 | 2.28E-02 | 3.18E-02 | 3.36E-02 | 5.88E-02 | 8.06E-02 | 1.01E-01 | 1.20E-01 | 1.20E-01 |
| Kr-85             | 0.00E+00 | 7.65E-05 | 1.50E-04 | 6.12E-04 | 2.03E-03 | 2.94E-03 | 3.24E-03 | 5.89E-03 | 8.39E-03 | 1.09E-02 | 1.35E-02 | 1.40E-02 |
| Kr-87             | 0.00E+00 | 9.49E-04 | 1.62E-03 | 5.78E-03 | 1.67E-02 | 2.12E-02 | 2.03E-02 | 3.22E-02 | 4.00E-02 | 4.54E-02 | 4.92E-02 | 4.43E-02 |
| Kr-88             | 0.00E+00 | 2.06E-03 | 3.80E-03 | 1.46E-02 | 4.55E-02 | 6.21E-02 | 6.42E-02 | 1.10E-01 | 1.47E-01 | 1.80E-01 | 2.10E-01 | 2.04E-01 |
| Xe-133            | 0.00E+00 | 4.24E-02 | 8.31E-02 | 3.38E-01 | 1.12E+00 | 1.62E+00 | 1.78E+00 | 3.24E+00 | 4.60E+00 | 5.97E+00 | 7.41E+00 | 7.64E+00 |
| Xe-135            | 0.00E+00 | 3.63E-03 | 6.99E-03 | 2.80E-02 | 9.10E-02 | 1.29E-01 | 1.40E-01 | 2.49E-01 | 3.48E-01 | 4.44E-01 | 5.41E-01 | 5.49E-01 |
| Total Noble Gas   | 0.00E+00 | 5.01E-02 | 9.75E-02 | 3.94E-01 | 1.30E+00 | 1.87E+00 | 2.04E+00 | 3.69E+00 | 5.23E+00 | 6.75E+00 | 8.35E+00 | 8.57E+00 |
|                   |          |          |          |          |          |          |          |          |          |          | I        |          |
| I-131             | 0.00E+00 | 1.69E-02 | 3.32E-02 | 1.35E-01 | 4.48E-01 | 6.05E-01 | 7.13E-01 | 1.29E+00 | 1.84E+00 | 2.39E+00 | 2.97E+00 | 3.06E+00 |
| <u>l-132</u>      | 0.00E+00 | 2.10E-03 | 3.82E-03 | 1.44E-02 | 4.44E-02 | 5.57E-02 | 6.09E-02 | 1.03E-01 | 1.36E-01 | 1.63E-01 | 1.88E-01 | 1.80E-01 |
| I-133             | 0.00E+00 | 1.16E-02 | 2.25E-02 | 9.10E-02 | 2.99E-01 | 4.01E-01 | 4.69E-01 | 8.46E-01 | 1.20E+00 | 1.54E+00 | 1.90E+00 | 1.94E+00 |
| I-134             | 0.00E+00 | 2.46E-03 | 3.96E-03 | 1.33E-02 | 3.61E-02 | 4.01E-02 | 3.88E-02 | 5.78E-02 | 6.76E-02 | 7.21E-02 | 7.35E-02 | 6.23E-02 |
| <u>l-135</u>      | 0.00E+00 | 6.11E-03 | 1.17E-02 | 4.64E-02 | 1.50E-01 | 1.97E-01 | 2.27E-01 | 4.02E-01 | 5.57E-01 | 7.05E-01 | 8.54E-01 | 8.59E-01 |
| Total Halogen     | 0.00E+00 | 3.92E-02 | 7.51E-02 | 3.00E-01 | 9.78E-01 | 1.30E+00 | 1.51E+00 | 2.70E+00 | 3.80E+00 | 4.87E+00 | 5.98E+00 | 6.11E+00 |
|                   |          |          |          |          |          |          | ·        |          |          |          |          | 1        |
| Cs-134            | 0.00E+00 | 1.07E-03 | 2.11E-03 | 8.59E-03 | 2.85E-02 | 3.85E-02 | 4.54E-02 | 8.26E-02 | 1.18E-01 | 1.53E-01 | 1.90E-01 | 1.96E-01 |
| <u>Cs-137</u>     | 0.00E+00 | 6.63E-04 | 1.30E-03 | 5.30E-03 | 1.76E-02 | 2.38E-02 | 2.80E-02 | 5.10E-02 | 7.26E-02 | 9.43E-02 | 1.17E-01 | 1.21E-01 |
| <u>Cs-138</u>     | 0.00E+00 | 8.76E-03 | 1.24E-02 | 3.67E-02 | 8.83E-02 | 8.65E-02 | 7.38E-02 | 9.72E-02 | 1.00E-01 | 9.43E-02 | 8.49E-02 | 6.35E-02 |
| Total Particulate | 0.00E+00 | 1.05E-02 | 1.58E-02 | 5.06E-02 | 1.34E-01 | 1.49E-01 | 1.47E-01 | 2.31E-01 | 2.91E-01 | 3.41E-01 | 3.92E-01 | 3.81E-01 |

# Torus Atmosenere (µCi/cc)

|                   | 03:00    | 03:15    | 03:30    | 03:45    | 04:00    | 04:15    | 04:30    | 04:45    | 05:00    | 05:15    | 05:30    |
|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Kr-85m            | 1.21E-01 | 1.28E-01 | 1.35E-01 | 1.29E-01 | 1.04E-01 | 9.98E-02 | 9.60E-02 | 9.24E-02 | 8.89E-02 | 8.55E-02 | 8.23E-02 |
| Kr-85             | 1.47E-02 | 1.62E-02 | 1.77E-02 | 1.77E-02 | 1.47E-02 |
| Kr-87             | 4.07E-02 | 3.91E-02 | 3.72E-02 | 3.24E-02 | 2.36E-02 | 2.06E-02 | 1.80E-02 | 1.57E-02 | 1.37E-02 | 1.19E-02 | 1.04E-02 |
| Kr-88             | 2.02E-01 | 2.10E-01 | 2.15E-01 | 2.02E-01 | 1.59E-01 | 1.49E-01 | 1.40E-01 | 1.32E-01 | 1.24E-01 | 1.17E-01 | 1.10E-01 |
| Xe-133            | 8.03E+00 | 8.83E+00 | 9.61E+00 | 9.60E+00 | 7.99E+00 | 7.98E+00 | 7.97E+00 | 7.96E+00 | 7.95E+00 | 7.94E+00 | 7.92E+00 |
| Xe-135            | 5.67E-01 | 6.11E-01 | 6.54E-01 | 6.42E-01 | 5.25E-01 | 5.15E-01 | 5.05E-01 | 4.96E-01 | 4.87E-01 | 4.77E-01 | 4.68E-01 |
| Total Noble Gas   | 8.98E+00 | 9.83E+00 | 1.07E+01 | 1.06E+01 | 8.82E+00 | 8.78E+00 | 8.74E+00 | 8.71E+00 | 8.67E+00 | 8.64E+00 | 8.61E+00 |
|                   | <u></u>  |          |          |          |          |          |          | ·        |          |          |          |
| I-131             | 3.22E+00 | 3.54E+00 | 3.86E+00 | 3.86E+00 | 3.53E+00 | 3.53E+00 | 3.53E+00 | 3.52E+00 | 3.52E+00 | 3.52E+00 | 3.51E+00 |
| <u>l-132</u>      | 1.76E-01 | 1.80E-01 | 1.82E-01 | 1.69E-01 | 1.43E-01 | 1.33E-01 | 1.23E-01 | 1.14E-01 | 1.06E-01 | 9.84E-02 | 9.13E-02 |
| -133              | 2.03E+00 | 2.21E+00 | 2.39E+00 | 2.37E+00 | 2.16E+00 | 2.14E+00 | 2.12E+00 | 2.10E+00 | 2.09E+00 | 2.07E+00 | 2.05E+00 |
| <u>l-134</u>      | 5.38E-02 | 4.86E-02 | 4.35E-02 | 3.57E-02 | 2.69E-02 | 2.21E-02 | 1.81E-02 | 1.49E-02 | 1.22E-02 | 1.00E-02 | 8.21E-03 |
| <u>l-135</u>      | 8.81E-01 | 9.44E-01 | 1.00E+00 |          | 8.72E-01 | 8.50E-01 | 8.28E-01 | 8.06E-01 | 7.85E-01 | 7.65E-01 | 7.45E-01 |
| Total Halogen     | 6.36E+00 | 6.93E+00 | 7.48E+00 | 7.41E+00 | 6.73E+00 | 6.67E+00 | 6.62E+00 | 6.56E+00 | 6.51E+00 | 6.46E+00 | 6.41E+00 |
|                   |          |          |          |          |          |          |          |          | '        |          | '        |
| <u>Cs-134</u>     | 2.06E-01 | 2.27E-01 | 2.48E-01 | 2.48E-01 | 2.27E-01 |
| <u>Cs-137</u>     | 1.27E-01 | 1.40E-01 | 1.53E-01 | 1.53E-01 | 1.40E-01 |
| Cs-138            | 4.84E-02 | 3.86E-02 | 3.05E-02 | 2.21E-02 | 1.47E-02 | 1.06E-02 | 7.69E-03 | 5.57E-03 | 4.03E-03 | 2.92E-03 | 2.11E-03 |
| Total Particulate | 3.82E-01 | 4.06E-01 | 4.31E-01 | 4.23E-01 | 3.82E-01 | 3.78E-01 | 3.75E-01 | 3.73E-01 | 3.71E-01 | 3.70E-01 | 3.69E-01 |

# Drywell Atmosphere (µCi/cc)

|                        | 00:00    | 00:15    | 00:30    | 00:45    | 01:00    | 01:15    | 01:30    | 01:45    | 02:00    | 02:15    | 02:30    | 02:45    |
|------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Kr-85m                 | 0.00E+00 | 7.37E-04 | 1.39E-03 | 5.45E-03 | 1.74E-02 | 2.43E-02 | 2.57E-02 | 4.49E-02 | 6.16E-02 | 7.69E-02 | 9.20E-02 | 9.14E-02 |
| Kr-85                  | 0.00E+00 | 5.85E-05 | 1.15E-04 | 4.68E-04 | 1.55E-03 | 2.25E-03 | 2.47E-03 | 4.50E-03 | 6.41E-03 | 8.32E-03 | 1.03E-02 | 1.07E-02 |
| Kr-87                  | 0.00E+00 | 7.26E-04 | 1.24E-03 | 4.42E-03 | 1.28E-02 | 1.62E-02 | 1.55E-02 | 2.46E-02 | 3.06E-02 | 3.47E-02 | 3.76E-02 | 3.39E-02 |
| Kr-88                  | 0.00E+00 | 1.57E-03 | 2.91E-03 | 1.11E-02 | 3.48E-02 | 4.74E-02 | 4.91E-02 | 8.40E-02 | 1.13E-01 | 1.38E-01 | 1.61E-01 | 1.56E-01 |
| Xe-133                 | 0.00E+00 | 3.24E-02 | 6.35E-02 | 2.59E-01 | 8.57E-01 | 1.24E+00 | 1.36E+00 | 2.47E+00 | 3.52E+00 | 4.56E+00 | 5.67E+00 | 5.84E+00 |
| Xe-135                 | 0.00E+00 | 2.78E-03 | 5.34E-03 | 2.14E-02 | 6.96E-02 | 9.90E-02 | 1.07E-01 | 1.91E-01 | 2.66E-01 | 3.39E-01 | 4.14E-01 | 4.19E-01 |
| <b>Total Noble Gas</b> | 0.00E+00 | 3.83E-02 | 7.45E-02 | 3.02E-01 | 9.93E-01 | 1.43E+00 | 1.56E+00 | 2.82E+00 | 4.00E+00 | 5.16E+00 | 6.38E+00 | 6.55E+00 |
|                        |          |          |          |          |          |          |          |          |          |          | '        |          |
| I-131                  | 0.00E+00 | 1.08E-02 | 2.11E-02 | 8.61E-02 | 2.85E-01 | 2.31E-01 | 2.72E-01 | 8.25E-01 | 1.17E+00 | 1.52E+00 | 1.89E+00 | 1.95E+00 |
| <u>l-132</u>           | 0.00E+00 | 1.34E-03 | 2.43E-03 | 9.20E-03 | 2.83E-02 | 2.13E-02 | 2.33E-02 | 6.54E-02 | 8.65E-02 | 1.04E-01 | 1.20E-01 | 1.15E-01 |
| <u>l-133</u>           | 0.00E+00 | 7.36E-03 | 1.43E-02 | 5.79E-02 | 1.91E-01 | 1.53E-01 | 1.79E-01 | 5.39E-01 | 7.61E-01 | 9.80E-01 | 1.21E+00 | 1.24E+00 |
| I-134                  | 0.00E+00 | 1.57E-03 | 2.52E-03 | 8.44E-03 | 2.30E-02 | 1.53E-02 | 1.48E-02 | 3.68E-02 | 4.31E-02 | 4.59E-02 | 4.68E-02 | 3.97E-02 |
| l-135                  | 0.00E+00 | 3.89E-03 | 7.44E-03 | 2.95E-02 | 9.55E-02 | 7.55E-02 | 8.67E-02 | 2.56E-01 | 3.55E-01 | 4.49E-01 | 5.44E-01 | 5.47E-01 |
| Total Halogen          | 0.00E+00 | 2.49E-02 | 4.78E-02 | 1.91E-01 | 6.23E-01 | 4.97E-01 | 5.77E-01 | 1.72E+00 | 2.42E+00 | 3.10E+00 | 3.81E+00 | 3.89E+00 |
|                        |          |          |          |          |          |          | ·        |          |          |          |          |          |
| Cs-134                 | 0.00E+00 | 6.84E-04 | 1.34E-03 | 5.47E-03 | 1.81E-02 | 1.47E-02 | 1.74E-02 | 5.26E-02 | 7.50E-02 | 9.73E-02 | 1.21E-01 | 1.25E-01 |
| Cs-137                 | 0.00E+00 | 4.22E-04 | 8.28E-04 | 3.38E-03 | 1.12E-02 | 9.09E-03 | 1.07E-02 | 3.25E-02 | 4.63E-02 | 6.01E-02 | 7.47E-02 | 7.71E-02 |
| Cs-138                 | 0.00E+00 | 5.58E-03 | 7.92E-03 | 2.34E-02 | 5.62E-02 | 3.31E-02 | 2.82E-02 | 6.19E-02 | 6.39E-02 | 6.01E-02 | 5.41E-02 | 4.05E-02 |
| Total Particulate      | 0.00E+00 | 6.68E-03 | 1.01E-02 | 3.23E-02 | 8.56E-02 | 5.69E-02 | 5.63E-02 | 1.47E-01 | 1.85E-01 | 2.17E-01 | 2.50E-01 | 2.43E-01 |

# Drywell Atmosunere (µCi/cc)

|                          | 03:00    | 03:15    | 03:30    | 03:45    | 04:00    | 04:15    | 04:30    | 04:45    | 05:00    | 05:15    | 05:30    |
|--------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Kr-85m                   | 9.26E-02 | 9.80E-02 | 1.03E-01 | 9.89E-02 | 7.93E-02 | 7.63E-02 | 7.34E-02 | 7.06E-02 | 6.79E-02 | 6.54E-02 | 6.29E-02 |
| Kr-85                    | 1.12E-02 | 1.24E-02 | 1.35E-02 | 1.35E-02 | 1.12E-02 |
| Kr-87                    | 3.11E-02 | 2.99E-02 | 2.84E-02 | 2.48E-02 | 1.80E-02 | 1.57E-02 | 1.37E-02 | 1.20E-02 | 1.04E-02 | 9.12E-03 | 7.95E-03 |
| Kr-88                    | 1.55E-01 | 1.60E-01 | 1.64E-01 | 1.55E-01 | 1.21E-01 | 1.14E-01 | 1.07E-01 | 1.01E-01 | 9.50E-02 | 8.94E-02 | 8.41E-02 |
| Xe-133                   | 6.14E+00 | 6.75E+00 | 7.35E+00 | 7.34E+00 | 6.11E+00 | 6.10E+00 | 6.09E+00 | 6.08E+00 | 6.07E+00 | 6.07E+00 | 6.06E+00 |
| Xe-135                   | 4.33E-01 | 4.67E-01 | 5.00E-01 | 4.91E-01 | 4.01E-01 | 3.94E-01 | 3.86E-01 | 3.79E-01 | 3.72E-01 | 3.65E-01 | 3.58E-01 |
| <b>Total Noble Gas</b>   | 6.86E+00 | 7.51E+00 | 8.16E+00 | 8.12E+00 | 6.74E+00 | 6.71E+00 | 6.68E+00 | 6.66E+00 | 6.63E+00 | 6.61E+00 | 6.58E+00 |
|                          | •        | ,        | •        |          | <u>'</u> | <u>.</u> | •        | ł        | I        | I        | I        |
| I-131                    | 2.05E+00 | 2.26E+00 | 2.46E+00 | 2.46E+00 | 2.05E+00 | 2.04E+00 | 2.04E+00 | 2.04E+00 | 2.04E+00 | 2.04E+00 | 2.03E+00 |
| I-132                    | 1.12E-01 | 1.15E-01 | 1.16E-01 | 1.07E-01 | 8.30E-02 | 7.70E-02 | 7.14E-02 | 6.62E-02 | 6.14E-02 | 5.70E-02 | 5.28E-02 |
| l-133                    | 1.29E+00 | 1.41E+00 | 1.52E+00 | 1.51E+00 | 1.25E+00 | 1.24E+00 | 1.23E+00 | 1.22E+00 | 1.21E+00 | 1.20E+00 | 1.19E+00 |
| I-134                    | 3.43E-02 | 3.10E-02 | 2.77E-02 | 2.28E-02 | 1.56E-02 | 1.28E-02 | 1.05E-02 | 8.60E-03 | 7.06E-03 | 5.80E-03 | 4.76E-03 |
| <u>l-135</u>             | 5.61E-01 | 6.01E-01 | 6.39E-01 | 6.22E-01 | 5.05E-01 | 4.92E-01 | 4.79E-01 | 4.67E-01 | 4.55E-01 | 4.43E-01 | 4.32E-01 |
| Total Halogen            | 4.05E+00 | 4.41E+00 | 4.77E+00 | 4.72E+00 | 3.90E+00 | 3.87E+00 | 3.83E+00 | 3.80E+00 | 3.77E+00 | 3.74E+00 | 3.71E+00 |
|                          |          |          |          |          |          |          |          |          |          | · ·      | 1        |
| Cs-134                   | 1.31E-01 | 1.45E-01 | 1.58E-01 | 1.58E-01 | 1.31E-01 |
| Cs-137                   | 8.12E-02 | 8.93E-02 | 9.74E-02 | 9.74E-02 | 8.12E-02 |
| Cs-138                   | 3.08E-02 | 2.46E-02 | 1.94E-02 | 1.41E-02 | 8.49E-03 | 6.15E-03 | 4.45E-03 | 3.22E-03 | 2.33E-03 | 1.69E-03 | 1.22E-03 |
| <b>Total Particulate</b> | 2.44E-01 | 2.59E-01 | 2.75E-01 | 2.69E-01 | 2.21E-01 | 2.19E-01 | 2.17E-01 | 2.16E-01 | 2.15E-01 | 2.14E-01 | 2.14E-01 |

# PASS Radiation ...eadings (mR/hr)

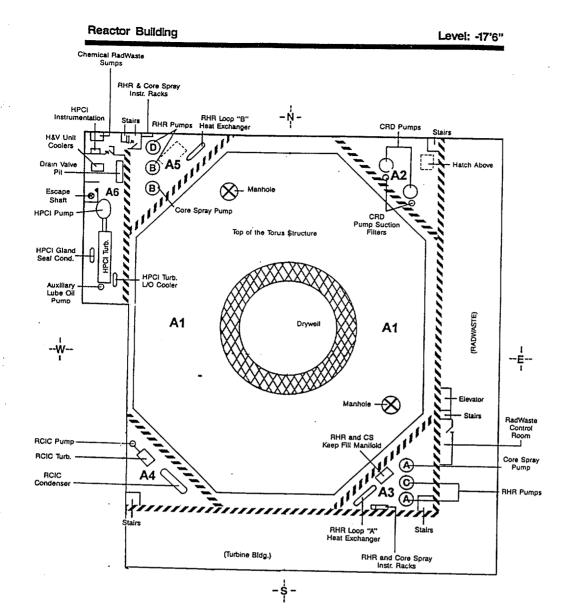
| PASS Radiation , eadings (mR/hr)         PASS Radiation , eadings (mR                                                                                                                                                                                                                                                                                                 | · · · · ·   | a)                                      | D                    |          | PASS     | S Radia                                                                                                         | ation                                                                                                                                                                                                                                                                                                                                                                                                                                   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| Reactor Coolant           10.0         1         0         2.06E-03         3.99E+03         5.59E+03         6.97E+03         8.11E+03         7.69E+03         7.38E+03         6.78E+03         6.25E+03         5.75E+03           12         0         1.43E-05         2.77E+01         3.88E+01         4.84E+01         5.63E+01         5.34E+01         5.12E+01         4.71E+01         4.34E+01         4.00E+01           1         2         2.06E-04         3.99E+02         5.59E+02         6.97E+02         8.11E+02         7.69E+02         7.38E+02         6.78E+02         6.25E+02         5.75E+02           12         2         1.43E-06         2.77E+00         3.88E+00         4.84E+00         5.63E+00         5.34E+00         5.12E+00         4.71E+00         4.34E+00         4.00E+00           1         4         2.06E-05         3.99E+01         5.59E+01         6.97E+01         8.11E+01         7.69E+01         7.38E+01         6.78E+01         6.25E+01         5.75E+02           12         4         1.43E-07         2.77E-01         3.88E+01         4.84E+01         5.63E-01         5.34E+01         5.12E+01         4.71E+01         4.00E+01           12         4         1.43E+03                                                                                                                                        | n e<br>T c  | Ince<br>les)                            | ldin<br>Ies          |          |          |                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                          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| Reactor Coolant           10.0         1         0         2.06E-03         3.99E+03         5.59E+03         6.97E+03         8.11E+03         7.69E+03         7.38E+03         6.78E+03         6.25E+03         5.75E+03           12         0         1.43E-05         2.77E+01         3.88E+01         4.84E+01         5.63E+01         5.34E+01         5.12E+01         4.71E+01         4.34E+01         4.00E+01           1         2         2.06E-04         3.99E+02         5.59E+02         6.97E+02         8.11E+02         7.69E+02         7.38E+02         6.78E+02         6.25E+02         5.75E+02           12         2         1.43E-06         2.77E+00         3.88E+00         4.84E+00         5.63E+00         5.34E+00         5.12E+00         4.71E+00         4.34E+00         4.00E+00           1         4         2.06E-05         3.99E+01         5.59E+01         6.97E+01         8.11E+01         7.69E+01         7.38E+01         6.78E+01         6.25E+01         5.75E+02           12         4         1.43E-07         2.77E-01         3.88E+01         4.84E+01         5.63E-01         5.34E+01         5.12E+01         4.71E+01         4.00E+01           12         4         1.43E+03                                                                                                                                        | olu<br>olu  | )ista<br>inch                           | thiel<br>inch<br>(b) | 00.00    | 00.15    | 00.30                                                                                                           | 00.45                                                                                                                                                                                                                                                                                                                                                                                                                                                    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| 10.0       1       0       2.06E-03       3.99E+03       5.59E+03       6.97E+03       8.11E+03       7.69E+03       7.38E+03       6.78E+03       6.25E+03       5.75E+03         12       0       1.43E-05       2.77E+01       3.88E+01       4.84E+01       5.63E+01       5.12E+01       4.71E+01       4.34E+01       4.00E+01         1       2       2.06E-04       3.99E+02       5.59E+02       6.97E+02       8.11E+02       7.69E+02       7.38E+02       6.78E+02       6.25E+02       5.75E+02         12       2       1.43E-06       2.77E+00       3.88E+00       4.84E+00       5.63E+00       5.34E+00       5.12E+00       4.71E+00       4.34E+00       4.00E+00         12       2       1.43E-06       2.77E+00       3.88E+00       4.84E+00       5.63E+00       5.34E+00       5.75E+01       6.78E+01       6.25E+01       5.75E+01         12       4       1.43E-07       2.77E+01       3.88E+01       4.84E+01       5.63E+01       5.34E+01       6.78E+01       6.25E+01       5.75E+01         12       4       1.43E+07       2.77E+01       3.88E+01       4.84E+01       5.63E+01       5.34E+01       5.12E+01       4.71E+01       4.00E+01       7.55E+01 <t< td=""><td></td><td></td><td>S I L</td><td>00.00</td><td>00.15</td><td>00.30</td><td>00,45</td><td>01:00</td><td>01:15</td><td>01:30</td><td>01:45</td><td>02:00</td><td>02:15</td></t<> |             |                                         | S I L                | 00.00    | 00.15    | 00.30                                                                                                           | 00,45                                                                                                                                                                                                                                                                                                                                                                                                                                                    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| 12       0       1.43E-05       2.77E+01       3.88E+01       4.84E+01       5.63E+01       5.34E+01       5.12E+01       4.71E+01       4.34E+01       4.00E+01         1       2       2.06E-04       3.99E+02       5.59E+02       6.97E+02       8.11E+02       7.69E+02       7.38E+02       6.78E+02       6.25E+02       5.75E+02         12       2       1.43E-06       2.77E+00       3.88E+00       4.84E+00       5.63E+00       5.34E+00       5.12E+00       4.71E+00       4.34E+00       4.00E+00         12       2       1.43E-06       2.77E+00       3.88E+00       4.84E+00       5.63E+00       5.34E+00       5.12E+00       4.71E+00       4.34E+00       4.00E+00         14.0       4       2.06E-05       3.99E+01       5.59E+01       6.97E+01       8.11E+01       7.69E+01       7.38E+01       6.78E+01       6.25E+01       5.75E+01         12       4       1.43E-07       2.77E-01       3.88E-01       4.84E+01       5.63E-01       5.12E+01       4.71E+01       4.34E+01       4.00E+01         14.0       1       0       2.39E-03       4.74E+03       7.04E+03       9.22E+03       1.11E+04       1.08E+04       1.07E+04       1.00E+04       9.39E+03       8.76                                                                                                                                                                                |             |                                         | 0                    | 2 065-03 | 3 00=+03 | 5 505+03                                                                                                        | 6 07=+02                                                                                                                                                                                                                                                                                                                                                                                                                                                 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| 1       2       2.06E-04       3.99E+02       5.59E+02       6.97E+02       8.11E+02       7.69E+02       7.38E+02       6.78E+02       6.25E+02       5.75E+02         12       2       1.43E-06       2.77E+00       3.88E+00       4.84E+00       5.63E+00       5.34E+00       5.12E+00       4.71E+00       4.34E+00       4.00E+00         1       4       2.06E-05       3.99E+01       5.59E+01       6.97E+01       8.11E+01       7.69E+01       7.38E+01       6.78E+01       6.25E+01       5.75E+01         1       4       2.06E-05       3.99E+01       5.59E+01       6.97E+01       8.11E+01       7.69E+01       7.38E+01       6.78E+01       6.25E+01       5.75E+01         12       4       1.43E-07       2.77E-01       3.88E-01       4.84E-01       5.63E-01       5.34E-01       5.12E-01       4.71E-01       4.34E-01       4.00E-01         Gas From Rx Coolant         14.0       1       0       2.39E-03       4.74E+03       7.04E+03       9.22E+03       1.11E+04       1.08E+04       1.07E+04       1.00E+04       9.39E+03       8.76E+03         12       0       1.66E-05       3.29E+01       4.89E+01       6.40E+01       7.74E+01       7.53E+01                                                                                                                                                                                                 | 10.0        |                                         |                      |          |          |                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                          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| 12       2       1.43E-06       2.77E+00       3.88E+00       4.84E+00       5.63E+00       5.34E+00       5.12E+00       4.71E+00       4.34E+00       4.00E+00         1       4       2.06E-05       3.99E+01       5.59E+01       6.97E+01       8.11E+01       7.69E+01       7.38E+01       6.78E+01       6.25E+01       5.75E+01         12       4       1.43E-07       2.77E-01       3.88E-01       4.84E-01       5.63E-01       5.34E-01       5.12E-01       4.71E+00       4.34E+00       4.00E+00         12       4       1.43E-07       2.77E-01       3.88E-01       4.84E-01       5.63E-01       5.34E-01       5.12E-01       4.71E-01       4.34E-01       4.00E-01         Gas From Rx Coolant         14.0       1       0       2.39E-03       4.74E+03       7.04E+03       9.22E+03       1.11E+04       1.08E+04       1.07E+04       1.00E+04       9.39E+03       8.76E+03         12       0       1.66E-05       3.29E+01       4.89E+01       6.40E+01       7.74E+01       7.53E+01       7.44E+01       6.96E+01       6.52E+01       6.09E+01         1       2       2.39E-04       4.74E+02       7.04E+02       9.22E+02       1.11E+03       1.08E+03                                                                                                                                                                                                |             | 7 7 7 7 F F F                           |                      |          |          |                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                          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| 1       4       2.06E-05       3.99E+01       5.59E+01       6.97E+01       8.11E+01       7.69E+01       7.38E+01       6.78E+01       6.25E+01       5.75E+01         12       4       1.43E-07       2.77E-01       3.88E-01       4.84E-01       5.63E-01       5.34E-01       5.12E-01       4.71E-01       4.34E-01       4.00E-01         Gas From Rx Coolant         14.0       1       0       2.39E-03       4.74E+03       7.04E+03       9.22E+03       1.11E+04       1.08E+04       1.07E+04       1.00E+04       9.39E+03       8.76E+03         12       0       1.66E-05       3.29E+01       4.89E+01       6.40E+01       7.74E+01       7.53E+01       7.44E+01       6.96E+01       6.52E+01       6.09E+01         1       2       2.39E-04       4.74E+02       7.04E+02       9.22E+02       1.11E+03       1.08E+03       1.00E+03       9.39E+02       8.76E+02         1       2       2.39E-04       4.74E+02       7.04E+02       9.22E+02       1.11E+03       1.08E+03       1.00E+03       9.39E+02    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| 12       4       1.43E-07       2.77E-01       3.88E-01       4.84E-01       5.63E-01       5.34E-01       5.12E-01       4.71E-01       4.34E-01       4.00E-01         Gas From Rx Coolant         14.0       1       0       2.39E-03       4.74E+03       7.04E+03       9.22E+03       1.11E+04       1.08E+04       1.07E+04       1.00E+04       9.39E+03       8.76E+03         12       0       1.66E-05       3.29E+01       4.89E+01       6.40E+01       7.74E+01       7.53E+01       7.44E+01       6.96E+01       6.52E+01       6.09E+01         1       2       2.39E-04       4.74E+02       7.04E+02       9.22E+02       1.11E+03       1.08E+03       1.07E+03       9.09E+03       8.76E+03                                                                                                                                                                                                                                                                                                                      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# PASS Radiation headings (mR/hr)

| <u> </u>                             |                      | <b>D</b> 1                            |          | PASS     | 6 Radia  | ition h  | eading   | <u>s (mR/</u> | hr)      |          |           | i.       |
|--------------------------------------|----------------------|---------------------------------------|----------|----------|----------|----------|----------|---------------|----------|----------|-----------|----------|
| Volume<br>(ml or cc)                 | Distance<br>(inches) | Shielding<br>(inches<br>Pb)           |          |          |          |          |          |               |          |          |           |          |
| Volume<br>(ml or c                   | ista<br>1ch          | Shieldir<br>(inches<br>Pb)            |          |          |          |          |          |               |          |          |           |          |
|                                      |                      | <u>551</u>                            | 02:30    | 02:45    | 03:00    | 03:15    | 03:30    | 03:45         | 04:00    | 04:15    | 04:30     | 04:45    |
| Reactor Cod                          |                      |                                       |          | 1        |          |          |          |               |          |          |           |          |
| 10.0                                 |                      |                                       | 5.27E+03 |          |          |          |          |               |          | 3.70E+03 | 3.67E+03  | 3.64E+03 |
|                                      | 12                   | 0                                     | 3.66E+01 | 3.56E+01 |          |          |          |               |          | 2.57E+01 | 2.55E+01  | 2.53E+01 |
|                                      | 1                    | 2                                     | 5.27E+02 | 5.13E+02 |          | 4.48E+02 |          |               | 3.73E+02 | 3.70E+02 | 3.67E+02  | 3.64E+02 |
|                                      | 12                   | 2                                     | 3.66E+00 | 3.56E+00 | 11       | 3.11E+00 | 2.84E+00 | 2.71E+00      | 2.59E+00 | 2.57E+00 | 2.55E+00  | 2.53E+00 |
|                                      | 1                    | 4                                     | 5.27E+01 | 5.13E+01 |          | 4.48E+01 | 4.08E+01 | 3.91E+01      | 3.73E+01 | 3.70E+01 | 3.67E+01  | 3.64E+01 |
|                                      | 12                   | 4                                     | 3.66E-01 | 3.56E-01 | 3.44E-01 | 3.11E-01 | 2.84E-01 | 2.71E-01      | 2.59E-01 | 2.57E-01 | 2.55E-01  | 2.53E-01 |
| Gas From R                           | x Coola              | nt                                    |          |          |          |          |          |               |          |          |           |          |
| 14.0                                 | 1                    | 0                                     | 8.11E+03 | 7.97E+03 | 7.76E+03 | 7.06E+03 | 6.48E+03 | 6.23E+03      | 5.99E+03 | 5.96E+03 | 5.94E+03  | 5.91E+03 |
|                                      | 12                   | 0                                     | 5.63E+01 | 5.53E+01 | 5.39E+01 | 4.90E+01 | 4.50E+01 | 4.33E+01      | 4.16E+01 | 4.14E+01 | 4.12E+01  | 4.11E+01 |
|                                      | 1                    | 2                                     | 8.11E+02 | 7.97E+02 | 7.76E+02 | 7.06E+02 | 6.48E+02 | 6.23E+02      | 5.99E+02 | 5.96E+02 | 5.94E+02  | 5.91E+02 |
|                                      | 12                   | 2                                     | 5.63E+00 | 5.53E+00 | 5.39E+00 | 4.90E+00 | 4.50E+00 | 4.33E+00      | 4.16E+00 | 4.14E+00 | 4.12E+00  | 4.11E+00 |
|                                      | 1                    | 4                                     | 8.11E+01 | 7.97E+01 | 7.76E+01 | 7.06E+01 | 6.48E+01 | 6.23E+01      | 5.99E+01 | 5.96E+01 | 5.94E+01  | 5.91E+01 |
|                                      | 12                   | 4                                     | 5.63E-01 | 5.53E-01 | 5.39E-01 | 4.90E-01 | 4.50E-01 | 4.33E-01      | 4.16E-01 | 4.14E-01 | 4.12E-01  | 4.11E-01 |
| <b>Torus Liquid</b>                  | d                    |                                       |          |          |          |          |          | ·             |          |          |           |          |
| 10.0                                 | 1                    | 0                                     | 5.77E+01 | 5.87E+01 | 6.10E+01 | 6.63E+01 | 7.16E+01 | 7.09E+01      | 5.85E+01 | 5.80E+01 | 5.75E+01  | 5.70E+01 |
|                                      | 12                   | 0                                     | 4.00E-01 | 4.08E-01 | 4.24E-01 | 4.60E-01 | 4.97E-01 | 4.92E-01      | 4.06E-01 | 4.03E-01 | 3.99E-01  | 3.96E-01 |
|                                      | 1                    | 2                                     | 5.77E+00 | 5.87E+00 | 6.10E+00 | 6.63E+00 | 7.16E+00 | 7.09E+00      | 5.85E+00 | 5.80E+00 | 5.75E+00  | 5.70E+00 |
|                                      | 12                   | 2                                     | 4.00E-02 | 4.08E-02 | 4.24E-02 | 4.60E-02 | 4.97E-02 | 4.92E-02      | 4.06E-02 | 4.03E-02 | 3.99E-02  | 3.96E-02 |
|                                      | 1                    | 4                                     | 5.77E-01 | 5.87E-01 | 6.10E-01 | 6.63E-01 | 7.16E-01 | 7.09E-01      | 5.85E-01 | 5.80E-01 | 5.75E-01  | 5.70E-01 |
| -                                    | 12                   | 4                                     | 4.00E-03 | 4.08E-03 | 4.24E-03 | 4.60E-03 | 4.97E-03 |               | 4.06E-03 | 4.03E-03 | 3.99E-03  | 3.96E-03 |
| Torus Atmos                          | sphere               | · · · · · · · · · · · · · · · · · · · |          |          |          | L        |          | ,,,,,,, _     |          |          | 0.002.00  | 0.002 00 |
| 14.0                                 | 1                    | 0                                     | 6.64E+01 | 6.82E+01 | 7.15E+01 | 7.82E+01 | 8.50E+01 | 8.46E+01      | 7.02E+01 | 6.99E+01 | 6.96E+01  | 6.93E+01 |
|                                      | 12                   | 0                                     | 4.61E-01 | 4.74E-01 | 4.96E-01 | 5.43E-01 | 5.90E-01 |               | 4.87E-01 | 4.85E-01 | 4.83E-01  | 4.81E-01 |
|                                      | 1                    | 2                                     | 6.64E+00 | 6.82E+00 | 7.15E+00 | 7.82E+00 | 8.50E+00 |               | 7.02E+00 |          |           | 6.93E+00 |
|                                      | 12                   | 2                                     | 4.61E-02 | 4.74E-02 | 4.96E-02 | 5.43E-02 | 5.90E-02 | 5.87E-02      | 4.87E-02 | 4.85E-02 | 4.83E-02  | 4.81E-02 |
|                                      | 1                    | 4                                     | 6.64E-01 | 6.82E-01 | 7.15E-01 | 7.82E-01 | 8.50E-01 | 8.46E-01      | 7.02E-01 | 6.99E-01 | 6.96E-01  | 6.93E-01 |
|                                      | 12                   | 4                                     | 4.61E-03 | 4.74E-03 | 4.96E-03 | 5.43E-03 | 5.90E-03 | 5.87E-03      | 4.87E-03 | 4.85E-03 | 4.83E-03  | 4.81E-03 |
| Containment                          | t Atmos              | phere                                 | I        |          |          |          |          |               |          | 1.002 00 | 4.002-001 | 4.012-03 |
| 14.0                                 | 1                    |                                       | 5.08E+01 | 5.22E+01 | 5.46E+01 | 5.98E+01 | 6.49E+01 | 6.46E+01      | 5.36E+01 | 5.34E+01 | 5.32E+01  | 5.30E+01 |
| •                                    | 12                   | 0                                     | 3.53E-01 | 3.62E-01 | 3.79E-01 | 4.15E-01 | 4.51E-01 | 4.49E-01      | 3.72E-01 | 3.71E-01 | 3.69E-01  | 3.68E-01 |
| -                                    | 1                    |                                       | 5.08E+00 | 5.22E+00 | 5.46E+00 |          | 6.49E+00 |               | 5.36E+00 |          | 5.32E+00  |          |
|                                      | 12                   | 2                                     | 3.53E-02 | 3.62E-02 | 3.79E-02 | 4.15E-02 | 4.51E-02 | 4.49E-02      | 3.72E-02 | 3.71E-02 | 3.69E-02  | 3.68E-02 |
|                                      | 1                    | 4                                     | 5.08E-01 | 5.22E-01 | 5.46E-01 | 5.98E-01 | 6.49E-01 | 6.46E-01      | 5.36E-01 | 5.34E-01 | 5.32E-01  | 5.30E-02 |
|                                      | 12                   | 4                                     | 3.53E-03 | 3.62E-03 | 3.79E-03 | 4.15E-03 | 4.51E-01 | 4.49E-03      | 3.72E-03 | 3.71E-03 | 3.69E-03  |          |
| •· · · · · · · · · · · · · · · · · · |                      |                                       | 0.002.00 |          | 0.102.00 | 7.102-00 | 7.016-03 |               | J.12C-03 | 5.710-03 | 3.092-03  | 3.68E-03 |

# PASS Radiation meadings (mR/hr)

| C.      | ŝ      | <i>a</i>          | 5         |                  |          | PASS     | S Radia  |
|---------|--------|-------------------|-----------|------------------|----------|----------|----------|
|         | or cc) | istance<br>nches) | Shielding | les              |          | ·····    |          |
| -       |        | ista<br>1ch       | niel      | inches<br>b)     |          |          |          |
|         |        |                   | S         | ,<br>D<br>D<br>D | 05:00    | 05:15    | 05:30    |
| Reacto  |        |                   |           |                  | ,        | ,        |          |
|         | 10.0   | 1                 |           | 0                |          |          | 3.56E+03 |
|         |        | 12                |           | 0                | 2.51E+01 | 2.49E+01 | 2.47E+01 |
|         | ~      | 1                 |           | 2                | 3.61E+02 | 3.59E+02 |          |
|         | -      | 12                |           | 2                | 2.51E+00 | 2.49E+00 | 2.47E+00 |
|         | _      | 1                 |           | 4                | 3.61E+01 | 3.59E+01 | 3.56E+01 |
|         | _      | 12                |           | 4                | 2.51E-01 | 2.49E-01 | 2.47E-01 |
| Gas Fro |        | ( Coola           | ant       |                  |          |          |          |
|         | 14.0   | 1                 |           | 0                | 5.89E+03 |          |          |
|         | -      | 12                |           | 0                | 4.09E+01 | 4.08E+01 | 4.06E+01 |
|         |        | 1                 |           | 2                | 5.89E+02 | 5.87E+02 | 5.85E+02 |
|         |        | 12                |           | 2                | 4.09E+00 | 4.08E+00 | 4.06E+00 |
|         |        | 1                 |           | 4                | 5.89E+01 | 5.87E+01 | 5.85E+01 |
|         |        | 12                |           | 4                | 4.09E-01 | 4.08E-01 | 4.06E-01 |
| Torus L | -      |                   |           |                  |          |          |          |
|         | 10.0   | 1                 |           | 0                | 5.66E+01 |          | 5.57E+01 |
|         |        | 12                |           | 0                | 3.93E-01 | 3.90E-01 | 3.87E-01 |
|         | _      | 1                 |           | 2                | 5.66E+00 | 5.62E+00 | 5.57E+00 |
|         |        | 12                |           | 2                | 3.93E-02 | 3.90E-02 | 3.87E-02 |
|         |        | 1                 |           | 4                | 5.66E-01 | 5.62E-01 | 5.57E-01 |
|         |        | 12                |           | 4                | 3.93E-03 | 3.90E-03 | 3.87E-03 |
| Torus A | tmos   | phere             |           |                  |          |          |          |
|         | 14.0   | 1                 |           | 0                | 6.90E+01 | 6.88E+01 | 6.85E+01 |
|         |        | 12                |           | 0                | 4.79E-01 | 4.78E-01 | 4.76E-01 |
|         |        | 1                 |           | 2                | 6.90E+00 | 6.88E+00 | 6.85E+00 |
|         |        | 12                |           | 2                | 4.79E-02 | 4.78E-02 | 4.76E-02 |
|         |        | 1                 |           | 4                | 6.90E-01 | 6.88E-01 | 6.85E-01 |
|         |        | 12                |           | 4                | 4.79E-03 | 4.78E-03 | 4.76E-03 |
| Contain | ment   | Atmos             | sph       | ere              |          |          |          |
|         | 14.0   | 1                 |           | 0                | 5.28E+01 | 5.26E+01 | 5.24E+01 |
|         |        | 12                |           | 0                | 3.67E-01 | 3.65E-01 | 3.64E-01 |
|         |        | 1                 |           | 2                | 5.28E+00 | 5.26E+00 | 5.24E+00 |
|         |        | 12                |           | 2                | 3.67E-02 | 3.65E-02 | 3.64E-02 |
|         | 18     | 1                 |           | 4                | 5.28E-01 | 5.26E-01 | 5.24E-01 |
|         |        | 12                |           | 4                | 3.67E-03 | 3.65E-03 | 3.64E-03 |
|         |        |                   |           |                  | l.       |          |          |



| Scenario |       |    | Radiatio | n Levels (n | ur/hr) |       |
|----------|-------|----|----------|-------------|--------|-------|
| Time     | A1    | A2 | A3       | A4          | A5     | A6    |
| 00:00    | 50    | 10 | 15       | 1 1         | 30     | 20    |
| 00:15    | 600   | 10 | 15       | 1           | 30     | 20    |
| 00:30    | 1200  | 10 | 120      | 1           | 170    | 20    |
| 00:45    | 2400  | 10 | 125      | 1           | 175    | 20    |
| 01:00    | 9000  | 10 | 130      | 1           | 180    | 20    |
| 01:15    | 12000 | 10 | 140      | 5           | 190    | 20    |
| 01:30    | 13500 | 10 | 140      | 15          | 190    | 20    |
| 01:45    | 18000 | 10 | 140      | 20          | 190    | 20    |
| 02:00    | 27000 | 10 | 140      | 30          | 190    | 20    |
| 02:15    | 30000 | 10 | 140      | 40          | 190    | 20    |
| 02:30    | 39000 | 10 | 140      | 50          | 190    | 20    |
| 02:45    | 45000 | 10 | 140      | 50          | 190    | 20    |
| 03:00    | 51000 | 10 | 140      | 50          | 190    | 20    |
| 03:15    | 54000 | 10 | 140      | 50          | 500    | 4000  |
| 03:30    | 54000 | 10 | 140      | 50          | 1500   | 12000 |
| 03:45    | 54000 | 10 | 140      | 50          | 2000   | 15000 |
| 04:00    | 54000 | 10 | 140      | 50          | 2700   | 20000 |
| 04:15    | 54000 | 10 | 140      | 50          | 2500   | 18500 |
| 04:30    | 54000 | 10 | 140      | 50          | 2400   | 18000 |
| 04:45    | 54000 | 10 | 140      | 50          | 2300   | 17500 |
| 05:00    | 54000 | 10 | 140      | 50          | 2200   | 16800 |
| 05:15    | 54000 | 10 | 140      | 50          | 1900   | 16200 |
| 05:30    | 54000 | 10 | 140      | 50          | 1800   | 15800 |

#### Notes:

Contraction to the second of the second

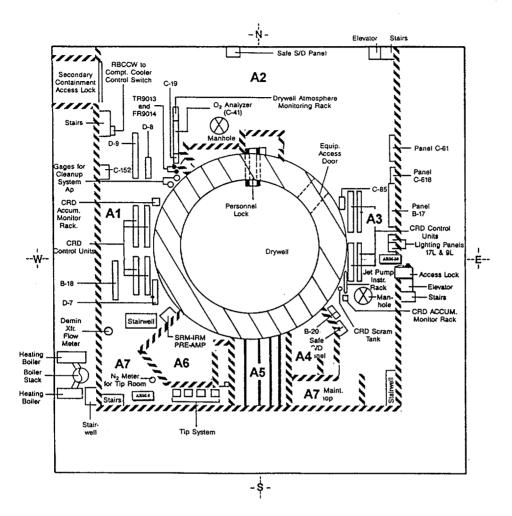
and the property was a surgery and the second

100.00

Zone Readings are average dose rates throughout the RHR, RCIC and HPCI corner rooms.

RHR B corner room will fill up with steam after HPCI steam leak (scenario time 03:10)

General Area contamination levels will increase to 15K dpm/100 cm2 and all surfaces will be damp/wet after HPCI steam leak (scenario time 03:10) Airborne Activity levels provided on Reactor Building Air Activity Data Table. · · · · · ·



|          |     |     |      |             |           |     |     | ARM Reading | s (mR/hr)     |
|----------|-----|-----|------|-------------|-----------|-----|-----|-------------|---------------|
|          |     |     |      |             |           |     |     | RB SE       | RB            |
| Scenario |     |     | Radi | ation Level | s (mr/hr) |     |     | Access      | Tip Rm        |
| Time     | A1  | A2  | A3   | A4          | A5        | A6  | A7  | ARM-10      | ARM-8         |
| 00:00    | 5   | 2   | 5    | 10          | 2000      | 40  | 2   | 4           | 0.08          |
| 00:15    | 25  | 2   | 25   | 10          | 1400      | 40  | 4   | 40          | 8.00          |
| 00:30    | 25  | 2   | 25   | 10          | 10000     | 40  | 4   | 40          | 8.00          |
| 00:45    | 25  | 2   | 25   | 10          | 15000     | 40  | 4   | 40          | <b>*</b> 8.00 |
| 01:00    | 25  | 2   | 25   | 10          | 12000     | 40  | 4   | 40          | 8.00          |
| 01:15    | 25  | 2   | 25   | 10          | 75        | 40  | 4   | 40          | 8.00          |
| 01:30    | 25  | 2   | 25   | 10          | 10        | 40  | 4   | 40          | 8.00          |
| 01:45    | 25  | 2   | 25   | 10          | 10        | 40  | 4   | 40          | 8.00          |
| 02:00    | 25  | 2   | 25   | 10          | 10        | 40  | 4   | 40          | 8.00          |
| 02:15    | 25  | 2   | 25   | 10          | 10        | 40  | 4   | 40          | 8.00          |
| 02:30    | 25  | 2   | 25   | 10          | 10        | 40  | 4   | 40          | 8.00          |
| 02:45    | 25  | 2   | 25   | 10          | 10        | 40  | 4   | 40          | 8.00          |
| 03:00    | 25  | 2   | 25   | 10          | 10        | 40  | 4   | 40          | 8.00          |
| 03:15    | 240 | 300 | 120  | 48          | 10        | 42  | 120 | OSH(>1E2)   | OSH(>1E2)     |
| 03:30    | 320 | 400 | 160  | 64          | 10        | 48  | 160 | OSH         | OSH           |
| 03:45    | 480 | 600 | 240  | 96          | 10        | 72  | 240 | OSH         | OSH           |
| 04:00    | 720 | 900 | 360  | 144         | 10        | 108 | 360 | OSH         | OSH           |
| 04:15    | 680 | 850 | 340  | 136         | 10        | 102 | 340 | OSH         | OSH           |
| 04:30    | 640 | 800 | 320  | 128         | 10        | 96  | 320 | OSH         | OSH           |
| 04:45    | 624 | 780 | 312  | 125         | 10        | 94  | 312 | OSH         | OSH           |
| 05:00    | 600 | 750 | 300  | 120         | 10        | 90  | 300 | OSH         | OSH           |
| 05:15    | 560 | 700 | 280  | 112         | 10        | 84  | 280 | OSH         | OSH           |
| 05:30    | 544 | 680 | 272  | 109         | 10        | 82  | 272 | ÓSH         | OSH           |

#### Notes:

Zone Readings are average dose rates throughout the zone area.

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General Area contamination levels will increase to 10K dpm/100 cm2 and all surfaces will be damp/wet after HPCI steam leak (scenario time 03:10) Airborne Activity levels provided on Reactor Building Air Activity Data Table.

#### **REACTOR BUILDING AIR ACTIVITY DATA - See Notes Below**

#### A. Reactor Building Air Concentrations in uCi/cc

| Isotope         | Prior to 03:10 | 03:10 - 03:30     | 03:30 - 04:30 | 04:30 to END |
|-----------------|----------------|-------------------|---------------|--------------|
|                 |                |                   |               |              |
| 1-131           | As Found       | 1.14E-04          | 2.28E-04      | 1.82E-04     |
| I-132           | As Found       | 6.25 <u>₽</u> -06 | 1.25E-05      | 1.00E-05     |
| I-133           | As Found       | 7.17E-05          | 1.43E-04      | 1.15E-04     |
| I-134           | As Found       | 1.90E-06          | 3.79E-06      | 3.03E-06     |
| I-135           | As Found       | 3.13E-05          | 6.25E-05      | 5.00E-05     |
| Total lodine    |                | 2.3E-04           | 4.5E-04       | 3.6E-04      |
|                 |                |                   |               |              |
| Kr-85m          | As Found       | 1.8E-05           | 3.6E-05       | 2.9E-05      |
| Kr-85           | As Found       | 2.2E-06           | 4.3E-06       | 3.5E-06      |
| Kr-87           | As Found       | 6.0E-06           | 1.2E-05       | 9.6E-06      |
| Kr-88           | As Found       | 3.0E-05           | 5.9E-05       | 4.8E-05      |
| Xe-133          | As Found       | 1.2E-03           | 2.4E-03       | 1.9E-03      |
| Xe-135          | As Found       | 8.4E-05           | 1.7E-04       | 1.3E-04      |
| Total Noble Gas |                | 1.3E-03           | 2.6E-03       | 2.1E-03      |

#### Elevation -17'6" in Zone A5

B. Reactor Building Air Concentrations in DAC-hr

#### Elevation -17'6" in Zone A5

|                | 1 11           |                |
|----------------|----------------|----------------|
| Scenario Time  |                | Noble Gas      |
| Prior to 03:10 | Not Applicable | Not Applicable |
| 03:10 - 03:30  | 6.5E+03        | 3.7E+01        |
| 03:30 - 04:30  | 1.3E+04        | 7.4E+01        |
| 04:30 to END   | 1.0E+04        | 5.9E+01        |

C. Reactor Building Air Concentrations in equivalent inhalation dose rate (mrem/hr)

#### Elevation -17'6" in Zone A5

| Scenario Time  |                | Noble Gas      |
|----------------|----------------|----------------|
| Prior to 03:10 | Not Applicable | Not Applicable |
| 03:10 - 03:30  | 1.6E+04        | 9.3E+01        |
| 03:30 - 04:30  | 3.2E+04        | 1.9E+02        |
| 04:30 to END   | 2.6E+04        | 1.5E+02        |

D. Reactor Building Air Sample Dose Rates (lodine Cartridge Only)

#### Elevation -17'6" in Zone A5

|                |         | mR/hr per cc)* | <br>Shielded (1 in | . lead in mR/hr | per cc)* |
|----------------|---------|----------------|--------------------|-----------------|----------|
| Scenario Time  |         | 1 ft           | <br>Contact        | 1 ft            | . ,      |
| Prior to 03:10 |         | As Read        | <br>As Read        | As Read         |          |
| 03:10 - 03:30  | 1.8E-04 | 1.2E-06        | <br>2.2E-06        | 1.5E-08         |          |
| 03:30 - 04:30  | 3.5E-04 | 2.4E-06        | 4.4E-06            | 3.0E-08         |          |
| 04:30 to END   | 2.8E-04 | 1.9E-06        | 3.5E-06            | 2.4E-08         |          |

\* Values must be multiplied by the sample volume in cubic centimeters to obtain the sample dose rate in mR/hr.

Notes:

- 1. Reactor Building Elevation Level 23 -Divide values by a factor of 50
- 2. All other Reactor Building Elevation Levels As Found

## **Plume Phase Environmental Information**

## **Release Segment Times**

|            |       |       |       | S     | Scenario/El | apsed Tim | le    |       |       |       |
|------------|-------|-------|-------|-------|-------------|-----------|-------|-------|-------|-------|
| Downwind   | 11:10 | 11:30 | 11:45 | 12:00 | 12:15       | 12:30     | 12:45 | 13:00 | 13:15 | 13:30 |
| Distance   | 03:10 | 03:30 | 03:45 | 04:00 | 04:15       | 04:30     | 04:45 | 05:00 | 05:15 | 05:30 |
| 0.5 miles  |       | 03:10 | 03:30 | 03:45 | 04:00       | 04:15     | 04:30 | 04:45 | 05:00 | 05:15 |
| 1.0 miles  |       | 03:10 | 03:30 | 03:45 | 04:00       | 04:15     | 04:30 | 04:45 | 05:00 | 05:15 |
| 1.5 miles  |       | 03:10 | 03:30 | 03:45 | 04:00       | 04:15     | 04:30 | 04:45 | 05:00 | 05:15 |
| 2.0 miles  |       | 03:10 | 03:30 | 03:45 | 04:00       | 04:15     | 04:30 | 04:45 | 05:00 | 05:15 |
| 2.5 miles  |       | 03:10 | 03:10 | 03:30 | 03:45       | 04:00     | 04:15 | 04:30 | 04:45 | 05:00 |
| 3.0 miles  |       | 03:10 | 03:10 | 03:30 | 03:45       | 04:00     | 04:15 | 04:30 | 04:45 | 05:00 |
| 3.5 miles  |       |       | 03:10 | 03:30 | 03:45       | 04:00     | 04:15 | 04:30 | 04:45 | 05:00 |
| 4.0 miles  |       |       | 03:10 | 03:30 | 03:45       | 04:00     | 04:15 | 04:30 | 04:45 | 05:00 |
| 4.5 miles  |       |       | 03:10 | 03:10 | 03:30       | 03:45     | 04:00 | 04:15 | 04:30 | 04:45 |
| 5.0 miles  |       |       | 03:10 | 03:10 | 03:30       | 03:45     | 04:00 | 04:15 | 04:30 | 04:45 |
| 5.5 miles  |       |       |       | 03:10 | 03:30       | 03:45     | 04:00 | 04:15 | 04:30 | 04:45 |
| 6.0 miles  |       |       |       | 03:10 | 03:30       | 03:45     | 04:00 | 04:15 | 04:30 | 04:45 |
| 6.5 miles  |       |       |       | 03:10 | 03:10       | 03:30     | 03:45 | 04:00 | 04:15 | 04:30 |
| 7.0 miles  |       |       |       | 03:10 | 03:10       | 03:30     | 03:45 | 04:00 | 04:15 | 04:30 |
| 7.5 miles  |       |       |       |       | 03:10       | 03:30     | 03:45 | 04:00 | 04:15 | 04:30 |
| 8.0 miles  |       |       |       |       | 03:10       | 03:30     | 03:45 | 04:00 | 04:15 | 04:30 |
| 8.5 miles  |       |       |       |       | 03:10       | 03:10     | 03:30 | 03:45 | 04:00 | 04:15 |
| 9.0 miles  |       |       |       |       | 03:10       | 03:10     | 03:30 | 03:45 | 04:00 | 04:15 |
| 9.5 miles  |       |       |       |       |             | 03:10     | 03:30 | 03:45 | 04:00 | 04:15 |
| 10.0 miles |       |       |       |       |             | 03:10     | 03:30 | 03:45 | 04:00 | 04:15 |

### Closed Window External Dose Rates (mR/hr)

|            |        | Scenario/Elapsed Time |       |                 |       |       |       |       |       |       |  |  |  |
|------------|--------|-----------------------|-------|-----------------|-------|-------|-------|-------|-------|-------|--|--|--|
| Downwind   | 11:10  | 11:30                 | 11:45 | 12:00           | 12:15 | 12:30 | 12:45 | 13:00 | 13:15 | 13:30 |  |  |  |
| Distance   | 03:10  | 03:30                 | 03:45 | 04:00           | 04:15 | 04:30 | 04:45 | 05:00 | 05:15 | 05:30 |  |  |  |
| 0.5 miles  | ······ | 2.0                   | 3.0   | 3.0             | 2.0   | 1.5   | 1.0   | 0.5   | 0.4   | 0.3   |  |  |  |
| 1.0 miles  |        | 6.0                   | 9.0   | 9.0             | 7.0   | 5.0   | 3.5   | 2.0   | 1.5   | 1.0   |  |  |  |
| 1.5 miles  |        | 5.5                   | 7.9   | 7.9             | 6.2   | 4.5   | 3.0   | 1.7   | 1.2   | 0.7   |  |  |  |
| 2.0 miles  |        | 5.0                   | 7.0   | 7.0             | 5.5   | 4.0   | 2.5   | 1.5   | 1.0   | 0.3   |  |  |  |
| 2.5 miles  |        | 4.3                   | 4.3   | 6.1             | 6.1   | 4.8   | 3.5   | 2.1   | 1.2   | 0.9   |  |  |  |
| 3.0 miles  |        | 3.7                   | 3.7   | 5.3             | 5.3   | 4.2   | 3.1   | 1.8   | 1.0   | 0.7   |  |  |  |
| 3.5 miles  |        |                       | 3.2   | 4.6             | 4.6   | 3.7   | 2.7   | 1.6   | 0.9   | 0.6   |  |  |  |
| 4.0 miles  |        |                       | 2.7   | 4.0             | 4.0   | 3.3   | 2.3   | 1.4   | 0.7   | 0.5   |  |  |  |
| 4.5 miles  |        |                       | 2.3   | 2.3             | 3.5   | 3.5   | 2.9   | 2.1   | 1.2   | 0.6   |  |  |  |
| 5.0 miles  |        |                       | 2.0   | 2.0             | 3.0   | 3.0   | 2.5   | 1.8   | 1.0   | 0.5   |  |  |  |
| 5.5 miles  |        |                       |       | 1. <del>9</del> | 2.8   | 2.8   | 2.3   | 1.7   | 0.9   | 0.5   |  |  |  |
| 6.0 miles  |        |                       |       | 1.7             | 2.6   | 2.6   | 2.1   | 1.5   | 0.9   | 0.4   |  |  |  |
| 6.5 miles  |        |                       |       | 1.6             | 1.6   | 2.4   | 2.4   | 1.9   | 1.4   | 0.8   |  |  |  |
| 7.0 miles  |        |                       |       | 1.5             | 1.5   | 2.3   | 2.3   | 1.7   | 1.3   | 0.8   |  |  |  |
| 7.5 miles  |        |                       |       |                 | 1.4   | 2.1   | 2.1   | 1.6   | 1.2   | 0.7   |  |  |  |
| 8.0 miles  |        |                       |       |                 | 1.3   | 2.0   | 2.0   | 1.4   | 1.1   | 0.7   |  |  |  |
| 8.5 miles  |        |                       |       |                 | 1.2   | 1.2   | 1.8   | 1.8   | 1.3   | 1.0   |  |  |  |
| 9.0 miles  |        |                       |       |                 | 1.1   | 1.1   | 1.7   | 1.7   | 1.2   | 0.9   |  |  |  |
| 9.5 miles  |        |                       |       |                 |       | 1.0   | 1.6   | 1.6   | 1.1   | 0.9   |  |  |  |
| 10.0 miles |        |                       |       |                 |       | 0.95  | 1.5   | 1.5   | 1.0   | 0.8   |  |  |  |

#### Notes:

Survey results at Waist Level will be the same at 2" off Ground Level when inside the plume.

## **Open Window External Dose Rates (mR/hr)**

|            | Scenario/Elapsed Time |       |       |       |       |       |       |       |       |       |  |  |  |
|------------|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--|--|
| Downwind   | 11:10                 | 11:30 | 11:45 | 12:00 | 12:15 | 12:30 | 12:45 | 13:00 | 13:15 | 13:30 |  |  |  |
| Distance   | 03:10                 | 03:30 | 03:45 | 04:00 | 04:15 | 04:30 | 04:45 | 05:00 | 05:15 | 05:30 |  |  |  |
| 0.5 miles  |                       | 4.6   | 6.9   | 6.9   | 4.6   | 3.5   | 2.3   | 1.2   | 0.9   | 0.6   |  |  |  |
| 1.0 miles  |                       | 13.8  | 20.7  | 20.7  | 16.1  | 11.5  | 8.1   | 4.6   | 3.5   | 2.3   |  |  |  |
| 1.5 miles  |                       | 12.6  | 18.3  | 18.3  | 14.3  | 10.3  | 6.8   | 4.0   | 2.8   | 1.6   |  |  |  |
| 2.0 miles  |                       | 11.5  | 16.1  | 16.1  | 12.7  | 9.2   | 5.8   | 3.5   | 2.3   | 0.6   |  |  |  |
| 2.5 miles  |                       | 9.9   | 9.9   | 14.0  | 14.0  | 11.1  | 8.1   | 4.9   | 2.9   | 2.0   |  |  |  |
| 3.0 miles  |                       | 8.5   | 8.5   | 12.1  | 12.1  | 9.7   | 7.1   | 4.2   | 2.4   | 1.7   |  |  |  |
| 3.5 miles  |                       |       | 7.3   | 10.5  | 10.5  | 8.5   | 6.2   | 3.6   | 2.0   | 1.5   |  |  |  |
| 4.0 miles  |                       |       | 6.2   | 9.2   | 9.2   | 7.5   | 5.4   | 3.1   | 1.7   | 1.2   |  |  |  |
| 4.5 miles  |                       |       | 5.4   | 5.4   | 7.9   | 7.9   | 6.6   | 4.7   | 2.7   | 1.4   |  |  |  |
| 5.0 miles  |                       |       | 4.6   | 4.6   | 6.9   | 6.9   | 5.8   | 4.1   | 2.3   | 1.2   |  |  |  |
| 5.5 miles  |                       |       |       | 4.3   | 6.4   | 6.4   | 5.2   | 3.8   | 2.1   | 1.1   |  |  |  |
| 6.0 miles  |                       |       |       | 4.0   | 6.0   | 6.0   | 4.8   | 3.5   | 2.0   | 1.0   |  |  |  |
| 6.5 miles  |                       |       |       | 3.7   | 3.7   | 5.6   | 5.6   | 4.4   | 3.2   | 1.9   |  |  |  |
| 7.0 miles  |                       |       |       | 3.4   | 3.4   | 5.2   | 5.2   | 4.0   | 3.0   | 1.7   |  |  |  |
| 7.5 miles  |                       |       |       |       | 3.2   | 4.9   | 4.9   | 3.6   | 2.8   | 1.6   |  |  |  |
| 8.0 miles  |                       |       |       |       | 2.9   | 4.6   | 4.6   | 3.3   | 2.5   | 1.5   |  |  |  |
| 8.5 miles  |                       |       |       |       | 2.7   | 2.7   | 4.2   | 4.2   | 3.0   | 2.3   |  |  |  |
| 9.0 miles  |                       |       |       |       | 2.5   | 2.5   | 4.0   | 4.0   | 2.8   | 2.2   |  |  |  |
| 9.5 miles  |                       |       |       |       |       | 2.4   | 3.7   | 3.7   | 2.5   | 2.0   |  |  |  |
| 10.0 miles |                       |       |       |       |       | 2.2   | 3.5   | 3.5   | 2.3   | 1.8   |  |  |  |

#### <u>Notes:</u>

Survey results at Waist Level will be the same at 2" off Ground Level when inside the plume.

## **Plume Phase Environmental Information**

|            |       |          |          | S        | Scenario/El | apsed Tim | le       |          |          |          |
|------------|-------|----------|----------|----------|-------------|-----------|----------|----------|----------|----------|
| Downwind   | 11:10 | 11:30    | 11:45    | 12:00    | 12:15       | 12:30     | 12:45    | 13:00    | 13:15    | 13:30    |
| Distance   | 03:10 | 03:30    | 03:45    | 04:00    | 04:15       | 04:30     | 04:45    | 05:00    | 05:15    | 05:30    |
| 0.5 miles  |       | 3.00E+03 | 4.50E+03 | 4.50E+03 | 3.00E+03    | 2.25E+03  | 1.50E+03 | 7.50E+02 | 6.00E+02 | 4.20E+02 |
| 1.0 miles  |       | 9.00E+03 | 1.35E+04 | 1.35E+04 | 1.05E+04    | 7.50E+03  | 5.25E+03 | 3.00E+03 | 2.25E+03 | 1.50E+03 |
| 1.5 miles  |       | 8.22E+03 | 1.19E+04 | 1.19E+04 | 9.31E+03    | 6.71E+03  | 4.44E+03 | 2.60E+03 | 1.84E+03 | 1.05E+03 |
| 2.0 miles  |       | 7.50E+03 | 1.05E+04 | 1.05E+04 | 8.25E+03    | 6.00E+03  | 3.75E+03 | 2.25E+03 | 1.50E+03 | 4.20E+02 |
| 2.5 miles  |       | 6.44E+03 | 6.44E+03 | 9.12E+03 | 9.12E+03    | 7.23E+03  | 5.25E+03 | 3.22E+03 | 1.87E+03 | 1.29E+03 |
| 3.0 miles  |       | 5.53E+03 | 5.53E+03 | 7.92E+03 | 7.92E+03    | 6.34E+03  | 4.60E+03 | 2.76E+03 | 1.56E+03 | 1.11E+03 |
| 3.5 miles  |       |          | 4.74E+03 | 6.87E+03 | 6.87E+03    | 5.56E+03  | 4.02E+03 | 2.37E+03 | 1.30E+03 | 9.49E+02 |
| 4.0 miles  |       |          | 4.07E+03 | 5.97E+03 | 5.97E+03    | 4.88E+03  | 3.52E+03 | 2.04E+03 | 1.08E+03 | 8.14E+02 |
| 4.5 miles  |       |          | 3.49E+03 | 3.49E+03 | 5.18E+03    | 5.18E+03  | 4.28E+03 | 3.08E+03 | 1.75E+03 | 9.01E+02 |
| 5.0 miles  |       |          | 3.00E+03 | 3.00E+03 | 4.50E+03    | 4.50E+03  | 3.75E+03 | 2.70E+03 | 1.50E+03 | 7.50E+02 |
| 5.5 miles  |       |          |          | 2.78E+03 | 4.20E+03    | 4.20E+03  | 3.42E+03 | 2.49E+03 | 1.40E+03 | 7.00E+02 |
| 6.0 miles  |       |          |          | 2.58E+03 | 3.92E+03    | 3.92E+03  | 3.12E+03 | 2.30E+03 | 1.31E+03 | 6.53E+02 |
| 6.5 miles  |       |          |          | 2.40E+03 | 2.40E+03    | 3.66E+03  | 3.66E+03 | 2.85E+03 | 2.12E+03 | 1.22E+03 |
| 7.0 miles  |       |          |          | 2.23E+03 | 2.23E+03    | 3.41E+03  | 3.41E+03 | 2.60E+03 | 1.95E+03 | 1.14E+03 |
| 7.5 miles  |       |          |          |          | 2.07E+03    | 3.18E+03  | 3.18E+03 | 2.37E+03 | 1.80E+03 | 1.06E+03 |
| 8.0 miles  |       |          |          |          | 1.92E+03    | 2.97E+03  | 2.97E+03 | 2.16E+03 | 1.66E+03 | 9.90E+02 |
| 8.5 miles  |       |          |          |          | 1.78E+03    | 1.78E+03  | 2.77E+03 | 2.77E+03 | 1.97E+03 | 1.53E+03 |
| 9.0 miles  |       |          |          |          | 1.65E+03    | 1.65E+03  | 2.58E+03 | 2.58E+03 | 1.80E+03 | 1.41E+03 |
| 9.5 miles  |       |          |          |          |             | 1.54E+03  | 2.41E+03 | 2.41E+03 | 1.64E+03 | 1.30E+03 |
| 10.0 miles |       |          |          |          |             | 1.43E+03  | 2.25E+03 |          | 1.50E+03 | 1.20E+03 |

### General Area Plume Immersion (CPM) - E-140N or Ludlum-12 with HP-210 probe

#### Notes:

Readings beyond the high scale are provided to allow indication of rate of change. Survey results at Waist Level will be the same at 2" off Ground Level when inside the plume.

## **Plume Phase Environmental Information**

## Thyroid Dose Rates (mRem/hr)

|            | Scenario/Elapsed Time |       |       |       |       |       |       |       |       |       |  |  |
|------------|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--|
| Downwind   | 11:10                 | 11:30 | 11:45 | 12:00 | 12:15 | 12:30 | 12:45 | 13:00 | 13:15 | 13:30 |  |  |
| Distance   | 03:10                 | 03:30 | 03:45 | 04:00 | 04:15 | 04:30 | 04:45 | 05:00 | 05:15 | 05:30 |  |  |
| 0.5 miles  |                       | 9.5   | 15.2  | 16.0  | 13.2  | 10.1  | 6.9   | 3.5   | 3.2   | 2.2   |  |  |
| 1.0 miles  |                       | 32.1  | 52.4  | 54.1  | 43.9  | 33.8  | 23.6  | 11.8  | 10.8  | 7.6   |  |  |
| 1.5 miles  |                       | 27.6  | 46.1  | 46.8  | 38.5  | 29.3  | 20.0  | 10.3  | 9.5   | 6.6   |  |  |
| 2.0 miles  |                       | 23.6  | 40.5  | 40.5  | 33.8  | 25.3  | 16.9  | 9.0   | 8.3   | 5.8   |  |  |
| 2.5 miles  |                       | 20.9  | 20.9  | 35.0  | 35.6  | 29.7  | 22.4  | 14.9  | 7.8   | 7.3   |  |  |
| 3.0 miles  |                       | 18.5  | 18.5  | 30.3  | 31.3  | 26.2  | 19.8  | 13.2  | 6.9   | 6.4   |  |  |
| 3.5 miles  |                       |       | 16.4  | 26.2  | 27.4  | 23,0  | 17.6  | 11.7  | 6.0   | 5.7   |  |  |
| 4.0 miles  |                       |       | 14.5  | 22.6  | 24.1  | 20.3  | 15.5  | 10.4  | 5.3   | 5.0   |  |  |
| 4.5 miles  |                       |       | 12.8  | 12.8  | 19.5  | 21.2  | 17.8  | 13.7  | 9.2   | 4.6   |  |  |
| 5.0 miles  |                       |       | 11.3  | 11.3  | 16.9  | 18.6  | 15.7  | 12.2  | 8.1   | 4.1   |  |  |
| 5.5 miles  |                       |       |       | 10.4  | 15.8  | 17.2  | 14.5  | 11.2  | 7.5   | 3.7   |  |  |
| 6.0 miles  |                       |       |       | 9.6   | 14.7  | 15.9  | 13.4  | 10.3  | 6.9   | 3.5   |  |  |
| 6.5 miles  |                       |       |       | 8.9   | 8.9   | 13.7  | 14.8  | 12.4  | 9.5   | 6.4   |  |  |
| 7.0 miles  |                       |       |       | 8.2   | 8.2   | 12.8  | 13.7  | 11.4  | 8.8   | 5.9   |  |  |
| 7.5 miles  |                       |       |       |       | 7.6   | 11.9  | 12.7  | 10.6  | 8.1   | 5.5   |  |  |
| 8.0 miles  |                       |       |       |       | 7.0   | 11.1  | 11.7  | 9.8   | 7.5   | 5.1   |  |  |
| 8.5 miles  |                       |       |       |       | 6.4   | 6.4   | 10.4  | 10.8  | 9.0   | 6.9   |  |  |
| 9.0 miles  |                       |       |       |       | 6.0   | 6.0   | 9.7   | 10.0  | 8.3   | 6.4   |  |  |
| 9.5 miles  |                       |       |       |       |       | 5.5   | 9.1   | 9.3   | 7.7   | 5.9   |  |  |
| 10.0 miles |                       |       |       |       |       | 5.1   | 8.4   | 8.6   | 7.1   | 5.4   |  |  |

#### Notes:

Thyroid Dose Rates are provided for controller and scenario information only.

## lodine I-131Concentration (µCi/cc)

|            |       |          |          | S        | Scenario/El | apsed Tim | ne       |          |          |          |
|------------|-------|----------|----------|----------|-------------|-----------|----------|----------|----------|----------|
| Downwind   | 11:10 | 11:30    | 11:45    | 12:00    | 12:15       | 12:30     | 12:45    | 13:00    | 13:15    | 13:30    |
| Distance   | 03:10 | 03:30    | 03:45    | 04:00    | 04:15       | 04:30     | 04:45    | 05:00    | 05:15    | 05:30    |
| 0.5 miles  |       | 7.34E-09 | 1.17E-08 | 1.23E-08 | 1.01E-08    | 7.80E-09  | 5.33E-09 | 2.73E-09 | 2.47E-09 | 1.73E-09 |
| 1.0 miles  |       | 2.47E-08 | 4.03E-08 | 4.16E-08 | 3.38E-08    | 2.60E-08  | 1.82E-08 | 9.10E-09 | 8.32E-09 | 5.82E-09 |
| 1.5 miles  |       | 2.12E-08 | 3.54E-08 | 3.60E-08 | 2.96E-08    | 2.25E-08  | 1.54E-08 | 7.91E-09 | 7.28E-09 | 5.09E-09 |
| 2.0 miles  |       | 1.82E-08 | 3.12E-08 | 3.12E-08 | 2.60E-08    | 1.95E-08  | 1.30E-08 | 6.89E-09 | 6.37E-09 | 4.46E-09 |
| 2.5 miles  |       | 1.61E-08 | 1.61E-08 | 2.70E-08 | 2.74E-08    | 2.29E-08  | 1.72E-08 | 1.15E-08 | 6.03E-09 | 5.61E-09 |
| 3.0 miles  |       | 1.42E-08 | 1.42E-08 | 2.33E-08 | 2.40E-08    | 2.01E-08  | 1.53E-08 | 1.02E-08 | 5.29E-09 | 4.95E-09 |
| 3.5 miles  | ·     |          | 1.26E-08 | 2.01E-08 | 2.11E-08    | 1.77E-08  | 1.35E-08 | 9.00E-09 | 4.63E-09 | 4.36E-09 |
| 4.0 miles  |       |          | 1.11E-08 | 1.74E-08 | 1.85E-08    | 1.56E-08  | 1.19E-08 | 7.97E-09 | 4.06E-09 | 3.85E-09 |
| 4.5 miles  |       |          | 9.84E-09 | 9.84E-09 | 1.50E-08    | 1.63E-08  | 1.37E-08 | 1.06E-08 | 7.05E-09 | 3.56E-09 |
| 5.0 miles  |       |          | 8.71E-09 | 8.71E-09 | 1.30E-08    | 1.43E-08  | 1.21E-08 | 9.36E-09 | 6.24E-09 | 3.12E-09 |
| 5.5 miles  |       |          |          | 8.03E-09 | 1.21E-08    | 1.32E-08  | 1.12E-08 | 8.63E-09 | 5.77E-09 | 2.88E-09 |
| 6.0 miles  |       |          |          | 7.41E-09 | 1.13E-08    | 1.23E-08  | 1.03E-08 | 7.95E-09 | 5.34E-09 | 2.67E-09 |
| 6.5 miles  |       |          |          | 6.84E-09 | 6.84E-09    | 1.06E-08  | 1.13E-08 | 9.52E-09 | 7.34E-09 | 4.94E-09 |
| 7.0 miles  |       |          |          | 6.31E-09 | 6.31E-09    | 9.85E-09  | 1.05E-08 | 8.79E-09 | 6.76E-09 | 4.57E-09 |
| 7.5 miles  |       |          |          |          | 5.83E-09    | 9.19E-09  | 9.73E-09 | 8.12E-09 | 6.24E-09 | 4.22E-09 |
| 8.0 miles  |       |          |          |          | 5.38E-09    | 8.57E-09  | 9.01E-09 | 7.50E-09 | 5.75E-09 | 3.91E-09 |
| 8.5 miles  |       |          |          |          | 4.96E-09    | 4.96E-09  | 8.00E-09 | 8.35E-09 | 6.93E-09 | 5.30E-09 |
| 9.0 miles  |       |          |          |          | 4.58E-09    | 4.58E-09  | 7.46E-09 | 7.73E-09 | 6.40E-09 | 4.89E-09 |
| 9.5 miles  |       |          |          |          |             | 4.22E-09  | 6.96E-09 | 7.16E-09 | 5.91E-09 | 4.51E-09 |
| 10.0 miles |       |          |          |          |             | 3.90E-09  | 6.50E-09 | 6.63E-09 | 5.46E-09 | 4.16E-09 |

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#### Notes:

I-131 concentrations are provided for controller and scenario information only.

### **Plume Phase Environmental Information**

|            |       | Scenario/Elapsed Time |       |       |       |       |       |       |       |       |  |  |  |
|------------|-------|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|--|--|--|
| Downwind   | 11:10 | 11:30                 | 11:45 | 12:00 | 12:15 | 12:30 | 12:45 | 13:00 | 13:15 | 13:30 |  |  |  |
| Distance   | 03:10 | 03:30                 | 03:45 | 04:00 | 04:15 | 04:30 | 04:45 | 05:00 | 05:15 | 05:30 |  |  |  |
| 0.5 miles  |       | 139                   | 221   | 233   | 191   | 147   | 101   | BKGD  | BKGD  | BKGD  |  |  |  |
| 1.0 miles  |       | 466                   | 760   | 785   | 637   | 490   | 343   | 172   | 157   | 110   |  |  |  |
| 1.5 miles  |       | 400                   | 669   | 679   | 559   | 425   | 290   | 149   | 137   | 96    |  |  |  |
| 2.0 miles  |       | 343                   | 588   | 588   | 490   | 368   | 245   | 130   | 120   | 84    |  |  |  |
| 2.5 miles  |       | 304                   | 304   | 509   | 517   | 432   | 325   | 217   | 114   | 106   |  |  |  |
| 3.0 miles  |       | 268                   | 268   | 439   | 454   | 380   | 288   | 192   | 100   | 93    |  |  |  |
| 3.5 miles  |       |                       | 237   | 380   | 398   | 334   | 255   | 170   | 87    | 82    |  |  |  |
| 4.0 miles  |       |                       | 210   | 328   | 350   | 294   | 225   | 150   | 77    | 73    |  |  |  |
| 4.5 miles  |       |                       | 186   | 186   | 284   | 307   | 259   | 199   | 133   | 67    |  |  |  |
| 5.0 miles  |       |                       | 164   | 164   | 245   | 270   | 228   | 177   | 118   | BKGD  |  |  |  |
| 5.5 miles  |       |                       |       | 152   | 229   | 250   | 211   | 163   | 109   | BKGD  |  |  |  |
| 6.0 miles  |       |                       |       | 140   | 213   | 231   | 194   | 150   | 101   | BKGD  |  |  |  |
| 6.5 miles  |       |                       |       | 129   | 129   | 199   | 214   | 180   | 138   | 93    |  |  |  |
| 7.0 miles  |       |                       |       | 119   | 119   | 186   | 198   | 166   | 128   | 86    |  |  |  |
| 7.5 miles  |       |                       |       |       | 110   | 173   | 184   | 153   | 118   | 80    |  |  |  |
| 8.0 miles  |       |                       |       |       | 101   | 162   | 170   | 142   | 109   | 74    |  |  |  |
| 8.5 miles  |       |                       |       |       | 94    | 94    | 151   | 157   | 131   | 100   |  |  |  |
| 9.0 miles  |       |                       |       |       | 86    | 86    | 141   | 146   | 121   | 92    |  |  |  |
| 9.5 miles  |       |                       |       |       |       | 80    | 131   | 135   | 111   | 85    |  |  |  |
| 10.0 miles |       |                       |       |       |       | 74    | 123   | 125   | 103   | 78    |  |  |  |

### Iodine Cartridge Readings (Net Sample CPM using E-600 with SPA-9 probe) - Pilgrim Field Teams

Notes:

Assumes sample volume of 20 cubic feet.

Assumes E-600 with SPA-9 probe counter efficiency of 1.5% for iodine cartridge

Assumes background count rate of 50 CPM.

All iodine cartridge dose rates are "Bkg levels or As Read" in mR/hr.

## **Plume Phase Environmental Information**

|            | <del>-</del> | `     |       |       | Scenario/E |       |       | ······ |        |       |
|------------|--------------|-------|-------|-------|------------|-------|-------|--------|--------|-------|
| Downwind   | 11:10        | 11:30 | 11:45 | 12:00 | 12:15      | 12:30 | 12:45 | 13:00  | 13:15  | 13:30 |
| Distance   | 03:10        | 03:30 | 03:45 | 04:00 | 04:15      | 04:30 | 04:45 | 05:00  | 05:15  | 05:30 |
| 0.5 miles  |              | BKGD  | BKGD  | BKGD  | BKGD       | BKGD  | BKGD  | BKGD   | BKGD   | BKGD  |
| 1.0 miles  |              | 77    | 126   | 130   | 106        | 81    | BKGD  | BKGD   | BKGD   | BKGD  |
| 1.5 miles  |              | 66    | 111   | 113   | 93         | 70    | BKGD  | BKGD   | BKGD   | BKGD  |
| 2.0 miles  |              | BKGD  | 97    | 97    | 81         | 61    | BKGD  | BKGD   | BKGD   | BKGD  |
| 2.5 miles  |              | BKGD  | BKGD  | 84    | 86         | 71    | BKGD  | BKGD   | BKGD   | BKGD  |
| 3.0 miles  |              | BKGD  | BKGD  | 73    | 75         | 63    | BKGD  | BKGD   | BKGD   | BKGD  |
| 3.5 miles  |              |       | BKGD  | 63    | 66         | BKGD  | BKGD  | BKGD   | BKGD   | BKGD  |
| 4.0 miles  |              |       | BKGD  | BKGD  | BKGD       | BKGD  | BKGD  | BKGD   | BKGD   | BKGD  |
| 4.5 miles  |              |       | BKGD  | BKGD  | BKGD       | BKGD  | BKGD  | BKGD   | BKGD   | BKGD  |
| 5.0 miles  |              |       | BKGD  | BKGD  | BKGD       | BKGD  | BKGD  | BKGD   | BKGD   | BKGD  |
| 5.5 miles  |              |       |       | BKGD  | BKGD       | BKGD  | BKGD  | BKGD   | BKGD   | BKGD  |
| 6.0 miles  |              |       |       | BKGD  | BKGD       | BKGD  | BKGD  | BKGD   | BKGD   | BKGD  |
| 6.5 miles  |              |       |       | BKGD  | BKGD       | BKGD  | BKGD  | BKGD   | BKGD · | BKGD  |
| 7.0 miles  |              |       |       | BKGD  | BKGD       | BKGD  | BKGD  | BKGD   | BKGD   | BKGD  |
| 7.5 miles  |              |       |       |       | BKGD       | BKGD  | BKGD  | BKGD   | BKGD   | BKGD  |
| 8.0 miles  |              |       |       |       | BKGD       | BKGD  | BKGD  | BKGD   | BKGD   | BKGD  |
| 8.5 miles  |              |       |       |       | BKGD       | BKGD  | BKGD  | BKGD   | BKGD   | BKGD  |
| 9.0 miles  |              |       |       |       | BKGD       | BKGD  | BKGD  | BKGD   | BKGD   | BKGD  |
| 9.5 miles  |              |       |       |       |            | BKGD  | BKGD  | BKGD   | BKGD   | BKGD  |
| 10.0 miles |              |       |       |       |            | BKGD  | BKGD  | BKGD   | BKGD   | BKGD  |

### lodine Cartridge Readings (Net Sample CPM using E-140-N with HP-210 probe) - MA Field Teams

Notes:

Assumes sample volume of 20 cubic feet.

Assumes E-140N with HP-210 probe counter efficiency of 0.25% for iodine cartridge. Assumes background count rate of 50 CPM.

**Plume Phase Environmental Information** 

## Gross Particulate Concentration (µCi/cc)

|            |       |          |          | S        | cenario/El | apsed Tim | e        |          |          |          |
|------------|-------|----------|----------|----------|------------|-----------|----------|----------|----------|----------|
| Downwind   | 11:10 | 11:30    | 11:45    | 12:00    | 12:15      | 12:30     | 12:45    | 13:00    | 13:15    | 13:30    |
| Distance   | 03:10 | 03:30    | 03:45    | 04:00    | 04:15      | 04:30     | 04:45    | 05:00    | 05:15    | 05:30    |
| 0.5 miles  |       | 4.77E-10 | 7.60E-10 | 8.02E-10 | 6.59E-10   | 5.07E-10  | 3.46E-10 | 1.77E-10 | 1.60E-10 | 1.12E-10 |
| 1.0 miles  |       | 1.60E-09 | 2.62E-09 | 2.70E-09 | 2.20E-09   | 1.69E-09  | 1.18E-09 | 5.91E-10 | 5.41E-10 | 3.78E-10 |
| 1.5 miles  |       | 1.38E-09 | 2.30E-09 | 2.34E-09 | 1.93E-09   | 1.46E-09  | 9.99E-10 | 5.14E-10 | 4.73E-10 | 3.31E-10 |
| 2.0 miles  |       | 1.18E-09 | 2.03E-09 | 2.03E-09 | 1.69E-09   | 1.27E-09  | 8.45E-10 | 4.48E-10 | 4.14E-10 | 2.90E-10 |
| 2.5 miles  |       | 1.05E-09 | 1.05E-09 | 1.75E-09 | 1.78E-09   | 1.49E-09  | 1.12E-09 | 7.47E-10 | 3.92E-10 | 3.65E-10 |
| 3.0 miles  |       | 9.25E-10 | 9.25E-10 | 1.51E-09 | 1.56E-09   | 1.31E-09  | 9.92E-10 | 6.61E-10 | 3.44E-10 | 3.22E-10 |
| 3.5 miles  |       |          | 8.18E-10 | 1.31E-09 | 1.37E-09   | 1.15E-09  | 8.78E-10 | 5.85E-10 | 3.01E-10 | 2.84E-10 |
| 4.0 miles  |       |          | 7.23E-10 | 1.13E-09 | 1.20E-09   | 1.01E-09  | 7.77E-10 | 5.18E-10 | 2.64E-10 | 2.50E-10 |
| 4.5 miles  |       |          | 6.40E-10 | 6.40E-10 | 9.77E-10   | 1.06E-09  | 8.92E-10 | 6.87E-10 | 4.58E-10 | 2.31E-10 |
| 5.0 miles  |       |          | 5.66E-10 | 5.66E-10 | 8.45E-10   | 9.29E-10  | 7.85E-10 | 6.08E-10 | 4.05E-10 | 2.03E-10 |
| 5.5 miles  |       |          |          | 5.22E-10 | 7.88E-10   | 8.60E-10  | 7.25E-10 | 5.61E-10 | 3.75E-10 | 1.87E-10 |
| 6.0 miles  |       |          |          | 4.82E-10 | 7.35E-10   | 7.97E-10  | 6.70E-10 | 5.17E-10 | 3.47E-10 | 1.73E-10 |
| 6.5 miles  |       |          |          | 4.45E-10 | 4.45E-10   | 6.86E-10  | 7.38E-10 | 6.19E-10 | 4.77E-10 | 3.21E-10 |
| 7.0 miles  |       |          |          | 4.10E-10 | 4.10E-10   | 6.40E-10  | 6.83E-10 | 5.72E-10 | 4.40E-10 | 2.97E-10 |
| 7.5 miles  |       |          |          |          | 3.79E-10   | 5.97E-10  | 6.33E-10 | 5.28E-10 | 4.05E-10 | 2.74E-10 |
| 8.0 miles  |       |          |          |          | 3.49E-10   | 5.57E-10  | 5.86E-10 | 4.88E-10 | 3.74E-10 | 2.54E-10 |
| 8.5 miles  |       |          |          |          | 3.22E-10   | 3.22E-10  | 5.20E-10 | 5.42E-10 | 4.50E-10 | 3.45E-10 |
| 9.0 miles  |       |          |          |          | 2.98E-10   | 2.98E-10  | 4.85E-10 | 5.02E-10 | 4.16E-10 | 3.18E-10 |
| 9.5 miles  |       |          |          |          |            | 2.75E-10  | 4.53E-10 | 4.65E-10 | 3.84E-10 | 2.93E-10 |
| 10.0 miles |       |          |          |          |            | 2.53E-10  | 4.22E-10 | 4.31E-10 | 3.55E-10 | 2.70E-10 |

#### Notes:

Gross Particulate concentrations are provided for controller and scenario information only.

### **Plume Phase Environmental Information**

| (Ludlum-12 | 2 with HP             | <u>210 prol</u> | be - Pilgri |       |       | · · · · · · · · | ,     |       |       |       |
|------------|-----------------------|-----------------|-------------|-------|-------|-----------------|-------|-------|-------|-------|
|            | Scenario/Elapsed Time |                 |             |       |       |                 |       |       |       |       |
| Downwind   | 11:10                 | 11:30           | 11:45       | 12:00 | 12:15 | 12:30           | 12:45 | 13:00 | 13:15 | 13:30 |
| Distance   | 03:10                 | 03:30           | 03:45       | 04:00 | 04:15 | 04:30           | 04:45 | 05:00 | 05:15 | 05:30 |
| 0.5 miles  |                       | 60              | 96          | 101   | 83    | 64              | BKGD  | BKGD  | BKGD  | BKGD  |
| 1.0 miles  |                       | 202             | 329         | 340   | 276   | 212             | 149   | 74    | 68    | BKGD  |
| 1.5 miles  |                       | 173             | 290         | 294   | 242   | 184             | 126   | 65    | BKGD  | BKGD  |
| 2.0 miles  |                       | 149             | 255         | 255   | 212   | 159             | 106   | BKGD  | BKGD  | BKGD  |
| 2.5 miles  |                       | 131             | 131         | 220   | 224   | 187             | 141   | 94    | BKGD  | BKGD  |
| 3.0 miles  |                       | 116             | 116         | 190   | 197   | 165             | 125   | 83    | BKGD  | BKGD  |
| 3.5 miles  |                       |                 | 103         | 165   | 173   | 145             | 110   | 74    | BKGD  | BKGD  |
| 4.0 miles  |                       | ÷               | 91          | 142   | 152   | 127             | 98    | 65    | BKGD  | BKGD  |
| 4.5 miles  |                       |                 | 80          | 80    | 123   | 133             | 112   | 86    | BKGD  | BKGD  |
| 5.0 miles  |                       | ÷               | 71          | 71    | 106   | 117             | 99    | 76    | BKGD  | BKGD  |
| 5.5 miles  |                       |                 |             | 66    | 99    | 108             | 91    | 71    | BKGD  | BKGD  |
| 6.0 miles  |                       |                 |             | 61    | 92    | 100             | 84    | 65    | BKGD  | BKGD  |
| 6.5 miles  |                       |                 |             | BKGD  | BKGD  | 86              | 93    | 78    | BKGD  | BKGD  |
| 7.0 miles  |                       |                 |             | BKGD  | BKGD  | 80              | 86    | 72    | BKGD  | BKGD  |
| 7.5 miles  |                       | :               |             |       | BKGD  | 75              | 80    | 66    | BKGD  | BKGD  |
| 8.0 miles  |                       |                 |             |       | BKGD  | 70              | 74    | 61    | BKGD  | BKGD  |
| 8.5 miles  |                       |                 |             |       | BKGD  | BKGD            | 65    | 68    | BKGD  | BKGD  |
| 9.0 miles  |                       |                 |             |       | BKGD  | BKGD            | 61    | 63    | BKGD  | BKGD  |
| 9.5 miles  |                       |                 |             |       |       | BKGD            | BKGD  | BKGD  | BKGD  | BKGD  |
| 10.0 miles |                       |                 |             |       |       | BKGD            | BKGD  | BKGD  | BKGD  | BKGD  |

## **Gross Particulate Activity - Net Sample in CPM**

/Ludlum 42 with LID 240 mecha Dilarim or E 140N with UD210 proba MA)

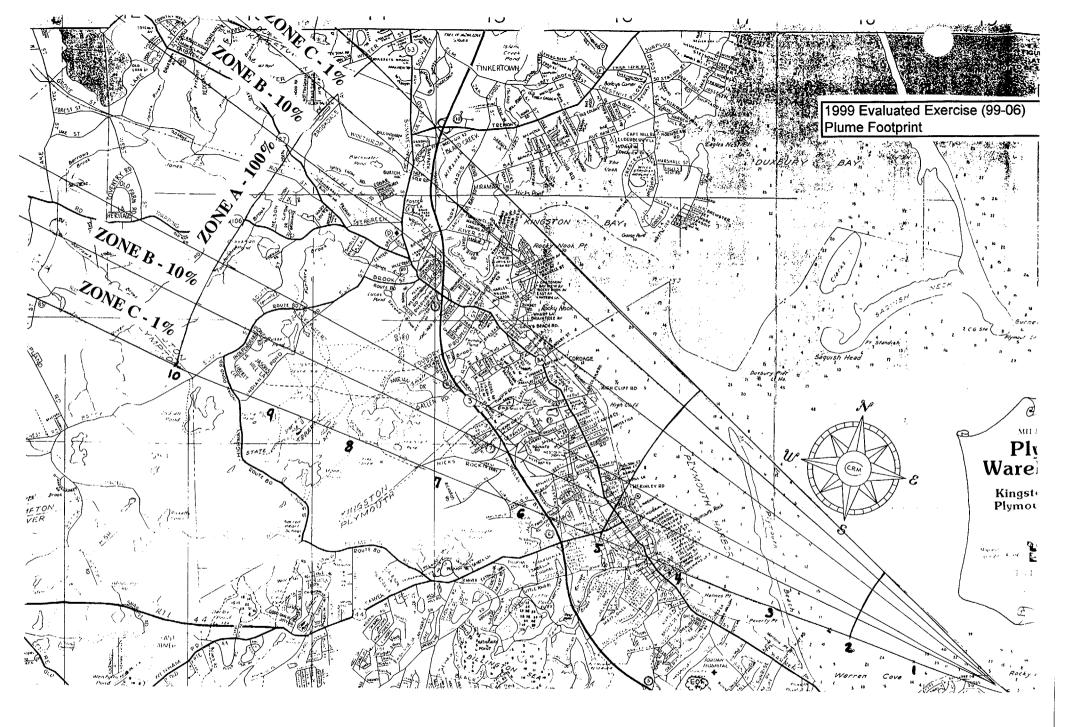
Notes:

Assumes sample volume of 20 cubic feet.

Assumes survey counter efficiency of 10% for air sample particulate filter.

Assumes background count rate of 50 CPM.

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#### **EMERGENCY RESPONSE FACILITIES**

Control Room (CR) (Simulator will be used in lieu of CR)

The Control Room is designated to be habitable under emergency conditions. The Control room contains those controls, instruments, and communications equipment necessary for operation of the plant under both normal and emergency conditions. The ventilation system, shielding, and structural integrity are designed and built to permit continuous occupancy during the postulated design basis accident.

The Nuclear Watch Engineer (NWE) maintains the responsibility for directing operations in the Control Room. The Control Room is located on the 37' level of the turbine building.

The equipment available in the Control Room provides early warning of a potential emergency situation and provides for a continuing evaluation of the emergency situation. Meteorological data is available from a meteorological tower which transmits wind speed and direction data to the Control Room. Respiratory protection equipment, anti-contamination clothing, portable survey instruments, counting equipment, tools, and rescue equipment are readily available within the Station.

Technical Support Center (TSC)

The TSC is located within the protected area on the first floor of the Operations and Maintenance Building. A separate office area within the TSC is available for Nuclear Regulatory Commission (NRC) personnel. This office contains telephone communications equipment. The TSC is of sufficient size to accommodate approximately 25 people. The TSC is equipped and staffed to provide expert technical capability to assess plant status and make recommendations on plant operations to the Control Room.

The TSC is activated upon declaration of an Alert, Site Area Emergency, and/or General Emergency. A closed circuit television monitor transmits pertinent instrument readings from the Control Room to the TSC. This monitor is controlled by TSC personnel and may be used to view instrumentation throughout the Control Room. The Emergency Plant Manager responds to the TSC. Adequate communications with the Control Room, other emergency facilities and offsite organizations is available. The TSC has dedicated telephone lines between the Control Room and TSC. Additionally, both the Control Room and TSC have access to the Station paging system (Gai-tronics) and the Station internal telephone system to further enhance communications. The TSC has the ability to communicate with the Control Room, the EOF, and NRC Headquarters in Bethesda, Maryland, and the Regional NRC Office in King of Prussia, Pennsylvania.

#### **Operations Support Center (OSC)**

An Operations Support Center has been established in the Operations and Maintenance Building adjacent to the TSC. The Operations support function is to provide personnel (non-Control Room shift personnel) in support of emergency re-entry/repair teams. The OSC Supervisor is responsible to the NWE/EPOS and/or the Emergency Plant Manager. Direct communication with the TSC is possible. Necessary equipment is available throughout the Station and may be accessed by personnel assigned to the OSC.

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Emergency Operations Facility (EOF)

The EOF is located in the basement of the Sheriff's facility on the grounds of the Plymouth County House of Correction in Plymouth, approximately four (4) miles west of Pilgrim Station. The EOF is a PNPS controlled and operated facility. During an emergency the EOF is staffed and equipped to provide the overall PNPS emergency response; coordination of radiological and environmental assessment; development of protective action recommendations for the general public; and coordination of emergency response activities with Federal, Commonwealth and local agencies. Security personnel will be assigned to control EOF access.

The EOF consists of the Operations Room, the Communications Room conference rooms and several office areas. In addition to the pre-designated PNPS staff, the EOF has space to accommodate nine (9) NRC representatives as well as representatives from FEMA, MDPH and Massachusetts Emergency Management Agency (MEMA) and key local authorities. If necessary, the EOF may be used to accommodate outside technical support groups and elements of the Recovery Center staff.

The primary function of the EOF is to provide management of the overall emergency response to any event at an Alert or higher classification. The EOF provides radiological and meteorological data to assess offsite radiation levels. This information is used by EOF personnel to update/inform the NRC and Commonwealth and local emergency response agencies about conditions potentially affecting the public in accordance with the Emergency Plan.

#### Media Center (MC)

The Media Center is a joint facility, staffed and operated by Pilgrim Station, and the Commonwealth of Massachusetts. The primary purpose of the facility is to provide a central location for the coordination of public information prior to its release to the news media. The communications capabilities include standard telephones, ring-down telephone line to the EOF, computer link to the EOF and telecopy links to all offsite agencies. The Center includes work areas for PNPS, each offsite agency, and the news media, as well as a briefing area for joint news conferences.

## Technical Assessment Group (TAG)

The TAG provides technical and engineering support to the TSC staff at Pilgrim Nuclear Power Station. The TAG Coordinator is responsible for coordinating activities, including requests from the TSC. The TAG Coordinator reports directly to the TSC Supervisor. The TAG is equipped with dedicated communications to the EOF, TSC and the Control Room.

## DRILL/EXERCISE ORGANIZATION

#### Lead Drill/Exercise Controller

The Lead Drill/Exercise Controller is responsible for the conduct of a successful Drill/Exercise and will coordinate Drill/Exercise preparations including the development of the scenario and messages. The Lead Drill/Exercise Controller will ensure the safe conduct of the Drill/Exercise and is responsible for resolution of any scenario-related inter facility questions, as well as the assurance that the conduct of the Drill/Exercise does not adversely impact the operation of the station. The Lead Drill/Exercise Controller will coordinate the preparation of a consolidated evaluation package and prepare an itemized list of corrective actions recommended as a result of the evaluation and critique.

#### Controller/Evaluators

The Controller/Evaluators are personnel selected to deliver Drill/Exercise Messages to designated players at specific times and places during the Drill/Exercise. They will inject or deliver additional messages, as may be required, to initiate appropriate player response to keep the Drill/Exercise action moving according to the scenario and to ensure the demonstration of all Drill/Exercise objectives. The Controller/Evaluators will be briefed on the instructions contained in this Drill/Exercise Manual.

As Controller/Evaluators, they are assigned to observe the Drill/Exercise and to judge the effectiveness of selected organizations, personnel, functions, and activities in response to the simulated emergency situation. Selection of Controller/Evaluators is based upon their expertise and qualifications to evaluate an assigned activity or area. They will record their observations using an evaluation form and provide recommendations on corrective actions to the Lead Drill/Exercise Controller prior to the scheduled critique. They will evaluate Drill/Exercise performance on the basis of standards or requirements contained in the PNPS Emergency Plan, Emergency Operations Procedures (EOPs) and the associated Implementing Procedures. They will take steps, whenever possible, to collect data on the time-and-motion aspects of the activities observed for post-Exercise use in designating and implementing system improvements. A Lead Controller/Evaluator is assigned to each emergency response facility. Each Lead Controller/Evaluator is responsible for all Controller, Evaluator, and Observer activities within that facility.

#### Players

The Players include PNPS personnel assigned to perform emergency functions as described in the Emergency Plan and Implementing Procedures. Players from offsite organizations and agencies (Commonwealth and local) are participants as they would be during an actual emergency situation.

The success of the Drill/Exercise is largely dependent upon player reaction, and knowledge of the Emergency Plans and Implementing Procedures, and an understanding of the Drill/Exercise Objectives. Initial conditions will be provided by Controller/Evaluators as appropriate. The Drill/Exercise Players are responsible for initiating actions during the Drill/Exercise in accordance with procedures, responsibilities, and tasks outlined for their

particular function in the Emergency Plan and Implementing Procedures. Each Drill/Exercise Player will advise their Controller/Evaluator prior to simulating required emergency actions to ensure that credit is awarded.

Drill/Exercise Players should not be excessively concerned with the mechanics of the scenario. This Drill/Exercise is designed to evaluate the Emergency Plan, the Implementing Procedures, and the Emergency Preparedness training program, and is not concerned with the probability, feasibility, or detailed mechanics of the simulated accident. Drill/Exercise Players should note any needed improvements that come to their attention during the Drill/Exercise and submit them to the appropriate Controller/Evaluator at the conclusion of the Drill/Exercise.

#### Evaluators

Evaluators include members of the NRC, INPO, or FEMA evaluation teams and they will have prior knowledge of the Drill/Exercise scenario. They will observe the Drill/Exercise and evaluate the ability to protect the health and safety of the public. The NRC will present their findings at the post-exercise critique.

#### Observers

Observers from PNPS and other organizations may be authorized, on a limited basis, to observe Drill/Exercise activity for personal education. Observers will report initially to the Emergency Preparedness Superintendent for credential review and authorized admittance. They will be provided with Drill/Exercise information as required. Requests to participate as an Observer will be made in writing and contain the Observer's full name, home address and phone number, and organization affiliation. Requests to participate as observers will be submitted to the Emergency Preparedness Superintendent no later than two weeks prior to the Drill/Exercise.

#### **GENERAL GUIDELINES**

To simulate an accident sequence severe enough to test the emergency response capabilities of participating organizations, it is necessary to postulate unrealistic situations and multiple failures of redundant reactor protection functions and systems. The objective of drills and exercises is to demonstrate the ability of participating organizations to protect the public, and appropriately respond to such improbable sequences of events.

Emergency response actions during simulated emergencies include:

- recognition and classification of emergency conditions
- assessment of onsite and offsite radiological consequences
- alert, notification, and mobilization of emergency response organizations
- activation and operation of emergency response facilities and equipment
- implementation of in-plant corrective actions
- preparation of reports, messages, and records, and
- recommendation of protective actions.

The Control Room Simulator (CRSIM) and the Emergency Operations Facility (EOF) are the central points for distribution of Drill/Exercise messages. Simulated plant parameters will be provided to the control room operators using messages and plant data sheets should the simulator fail. Radiological and meteorological data is not provided to players automatically, but is distributed by controllers when players demonstrate the capability to obtain that information from appropriate sources. At no time, unless noted specifically as an exception, will information be interjected at a point where it would not be available in a real emergency. The Lead Drill/Exercise Controller may interject other information or change a message to ensure that the Drill/Exercise progresses as planned.

The contingency messages are to be delivered only if the designated players do not complete a specific action or accomplish previously specified criteria. The information contained in the controller notes in Section 4.0 and information in Section 5.0 are for use by Observer/Controllers only and is to be disseminated to players only when the ability to obtain the information from actual sources is demonstrated.

The Drill/Exercise Players are expected to "free play" the scenario to the extent practical. Notifications of, and contact with, supervisors, plant management, and corporate management will be made in accordance with the appropriate corporate and site implementing procedures.

Since it is required that the Drill/Exercise test offsite emergency activities, it is necessary to postulate non-credible situations. The players should accept the Drill/Exercise Messages as written. If corrective actions could be postulated that would terminate the emergency, they should be identified by the Players to the Lead Facility Controller so that credit can be given for postulated actions.

Notifications of, and communications with, offsite agencies, including the NRC, will be made in accordance with appropriate implementing procedure, unless otherwise directed by the Lead Facility Controller. The Plant Emergency Alarm shall be sounded and site-wide announcements shall be made as appropriate to the development of the Drill/Exercise Scenario. If directed by these announcements, a site evacuation will be performed.

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The postulated accident conditions may result in a simulated radiological release which necessitates the consideration of protective actions for plant personnel and the general public. Meteorological conditions may be varied throughout the Drill/Exercise.

Participants will perform appropriate radiological monitoring and dose assessment activities. Onsite PNPS emergency response personnel shall use required protective clothing, if appropriate.

Participation by PNPS onsite personnel directly involved in responding to an emergency shall be carried out to the fullest extent possible, including the deployment of radiological monitoring teams, emergency repair teams, and other emergency workers.

Due to time and logistical constraints, it will be necessary to accelerate certain parameters, data and events that pertain to fuel damage. If required by the scenario, reactor coolant and/or containment atmosphere "grab" samples will be obtained and analyzed utilizing the Post Accident Sampling System (PASS) (simulated). However, resulting data will be simulated through the appropriate controller.

Since there are several segments of the Drill/Exercise that depend on proper messages between the Control Room, TSC, OSC, and EOF, notification messages between these contact points may be reviewed by the Controller/Evaluators prior to their issuance. The Controller/Evaluator may interject other information or change a message to ensure that the Drill/Exercise progresses as planned. Only Lead Facility Controllers can modify Drill/Exercise Messages or initiate Free Play Messages.

The Drill/Exercise will be observed by Controllers/Evaluators who have the qualifications to evaluate the activity in their assigned locations. Evaluation of the Drill/Exercise will be based on the requirements contained in the Emergency Plan and Implementing Procedures. Controller/Evaluators will prepare evaluation forms and provide recommendations on corrective actions to the Lead Drill/Exercise Controller.

Following the Drill/Exercise, the Drill/Exercise Coordinator will conduct a Lead Controller debriefing. Negative and positive items will be identified for inclusion in the Drill/Exercise Report. The report will be issued within 30 working days of the Drill/Exercise. Designated report reviewer will determine whether any deficiencies and/or corrective actions are required. Approval of identified corrective actions are required.

## PRECAUTIONS AND LIMITATIONS

This section provides guidance for all Drill/Exercise Controllers and Evaluators for the conduct of this Drill/Exercise. Prior to initiation of the Drill/Exercise, a briefing will be held to review the entire Drill/Exercise process with all the Drill/Exercise Controllers/Evaluators identified in this manual.

- Should, at any time during the conduct of this Drill/Exercise, an actual emergency situation arise, all activities and communications related to the Drill/Exercise will be suspended. It will be the responsibility of any Drill/Exercise Controller that becomes aware of an actual emergency to suspend Drill/Exercise response in his/her immediate area and to inform the Lead Drill/Exercise Controller of the situation. Upon notification of an actual emergency, the Lead Drill/Exercise Controller will make the decision to suspend all or some of the Drill/Exercise activities or to place a temporary hold on, or terminate the Drill/Exercise.
- Any action that would, in the opinion of the Controller/Evaluator, place either an individual or component in an unsafe condition, the Controller/Evaluator is responsible for intervening in the individual's actions and terminating the unsafe activity immediately. Upon termination of the activity, the Controller/Evaluator is responsible for contacting the Lead Drill/Exercise Controller and informing him/her of the situation.
- Manipulation of any plant operating system, valves, breakers, or controls in response to this Drill/Exercise are only to be simulated. There is to be no alternation of any plant operating equipment, systems, or circuits during the response to this Drill/Exercise.
- No pressurization of fire hoses, discharging of fire extinguishers, or initiation of any fire suppression systems will be allowed for the Drill/Exercise.
- All repair activities associated with the scenario will be simulated, with extreme caution emphasized around operating equipment.
- All telephone communications, radio transmissions, and public address announcements related to the Drill/Exercise must begin and end with the statement, "This is a Drill." Should a Controller/Evaluator witness an Drill/Exercise participant not observing this practice, it is the Controller/Evaluator's responsibility to remind the individual of the need to follow this procedure.
- Any PNPS motor vehicle response to this Drill/Exercise, will observe all normal motor vehicle operating laws including posted speed limits, stop lights/signs, one way streets, etc.
- Should any onsite security actions be required in response to this Drill/Exercise, Drill/Exercise participants are to cooperate s directed by the Security Force, and security representatives are to be prudent and tolerant in their actions.
- Exercise participants are to inject as much realism into the Drill/Exercise as is consistent with its safe performance, however, caution must be used to prevent overreaction.

- Care must be taken to prevent any non-participating individuals who may observe Drill/Exercise activities from believing that an actual emergency exists. Any Drill/Exercise Controller/Evaluator who is aware of an individual or group of individuals in the immediate vicinity who may have becomes alarmed or confused about the situation, should approach that individual or group and explain the nature of the Drill/Exercise and its intent.
- If you are entering normal nuclear station radiation and contamination areas, observe all rules and procedures; no one (including Observer/Controllers) is exempt from normal station radiological practices and procedures.

NOTE: DO NOT ENTER HIGH RADIATION AREAS IN THE PLANT; FOLLOW ALARA PRINCIPLES

## PLAYER GUIDELINES

The success of the Drill/Exercise is largely dependent on player performance. Appropriate reaction to simulated emergency conditions and demonstrated competence in the Emergency Plan and Implementing Procedures are the key criteria by which the players are evaluated. It is imperative, therefore, that all player actions and activities are witnessed by a Controller/Evaluator. Those actions that are to be simulated must be brought to the attention of the Controller/Evaluator. Observation of response actions taken is mandatory for credit to be given for demonstration of an objective. Players are requested to observe the following guidelines:

- Maintain a serious attitude throughout the Drill/Exercise; this is especially true late in the Drill/Exercise or when activity is limited.
- Be courteous and professional at all times.
- Identify yourself by name and function to the Controller/Evaluator.
- Elements of Drill/Exercise play will be introduced through the use of controlled messages, and information generated by Players as a result of the particular emergency activity performed. Therefore, be responsible for initiating actions in accordance with instructions and your responsibilities.
- Communications should be concise and formal; always include "This is a Drill."
- Use and demonstrate knowledge of the Emergency Plans and Implementing Procedures.
- Use all resources and equipment available as you would in an actual emergency.
- Remember, one of the main purposes of an Drill/Exercise is for you, the player, to assure yourself that you are adequately prepared. Areas for improvement or lessons learned, when identified, will improve your overall emergency preparedness. Markedup procedures or action items can be sent to the Emergency Preparedness Superintendent, 600 Rocky Hill Road, Pilgrim Station or call 830-8041.
- CONTROLLERS serve an active role in the Drill/Exercise by providing messages or instructions to the participants. They may also serve to initiate certain actions to assure continuity of the events described in the Drill/Exercise scenario. They also serve as EVALUATORS.
- EVALUATORS will be noting all actions, both positive and negative. They will be the main source of input to the PNPS critique.
- NRC Evaluators will be critiquing the Drill/Exercise and the performance of the participants.
- Play out all actions, as much as possible, in accordance with the Emergency Plan and Procedures as if it were a real emergency.

- Identify your actions to the Controller, speak out load, identifying your key actions and decisions to the Controllers and Federal Evaluators. This may seem artificial but it will assist in the evaluation process and is to your benefit.
- Any messages transmitted over communication lines or radios shall be preceded and followed by the statement <u>"THIS IS A DRILL"</u>.
- You should play as if radiation levels are actually present, in accordance with the information you have received. Unless otherwise specified, this will require normal radiological control measures including the wearing of protective clothing.
- Non-participants are exempt from acting on radiation levels specified for the emergency Drill/Exercise. However, normal radiological control practices shall be followed throughout the course of the Drill/Exercise.
- Several plant and radiological parameters will be available upon request at any time or at predetermined times during the Drill/Exercise. These plant parameters will be available in the Control Room (simulator).
- Only selected parameters and readings will be provided. The selected information will be sufficient to make decisions in accordance with PNPS plans and procedures.
- <u>DO NOT</u> BECOME OVERLY CONCERNED WITH THE MECHANICS OF THE REACTOR OR THE CAUSE OF THE ACCIDENT. THIS Drill/Exercise IS DESIGNED TO TEST PNPS PLANS AND PROCEDURES AND IS NOT CONCERNED WITH ESTABLISHING THE PROBABILITY, FEASIBILITY OR DETAILED MECHANICS OF THE SIMULATED ACCIDENT.
- There will be one or more Controllers at each important location to provide information and clarification.
- Any participants outside the plant property who encounter members of the news media during the Drill/Exercise should avoid responding to any questions. All press inquiries should be directed to the Lead Drill/Exercise Controller at the EOF.
- Do not take actions that would result in actual alterations of valve and switch positions in response to scenario simulations. Any event or operation outside the scenario that results in an actual or potential danger to plant operation or safety will take precedence over Drill/Exercise activity.
- Any PNPS motor vehicle response to this Drill/Exercise will observe all normal motor vehicle operating laws including posted speed limits, stop lights/signs, one way streets, etc.
- Should any onsite security actions be required in response to this Drill/Exercise, participants are to cooperate as directed by the Security Force; Security representatives are to be prudent and tolerant in their actions.
- While Drill/Exercise participants are to inject as much realism into the Drill/Exercise as possible, the safety of the plant and personnel shall not be jeopardized.

#### **OBSERVER GUIDELINES**

- Observers should not participate in the Drill/Exercise nor interfere in the actions taken by the Drill/Exercise participants, Controllers or Evaluators. Questions should be directed to Controllers, not participants.
- The event times and scenario are confidential and should be kept so during the Drill/Exercise. Do not discuss these with the participants.
- Identification badges and arm-bands are to be worn visibly by the Observers. Identification devices should be returned at the end of the Drill/Exercise or critique. Identify yourself to the Drill/Exercise Controllers.
- Observers should enter emergency facilities via their main entrance and check in with security personnel.
- Observers requiring emergency facility access during the Drill/Exercise should contact Pilgrim Station Emergency Preparedness Superintendent, 600 Rocky Hill Road, Pilgrim Station, or call 830-8041 two (2) weeks prior to the Drill/Exercise.

#### **CONTROLLER GUIDELINES**

Each Controller/Evaluator should be familiar with the following:

- The Drill/Exercise objectives.
- Precautions and limitations.
- The Drill/Exercise scenario, including assumptions, initiating events, and the expected player response.
- The various locations that will be involved and the specific items to be observed at those locations.
- The evaluation process.

Controller/Evaluators will position themselves at their assigned locations 30 minutes prior to the activation of the facility for which they have responsibility.

Controller Communications will be tested prior to Drill/Exercise commencement. All watches and clocks will be synchronized with the Lead Drill/Exercise Controller as part of the communications testing.

All Controller/Evaluators will comply with instructions from the Lead Drill/Exercise Controller.

Each Controller/Evaluator will have copies of the messages controlling the progress of the Drill/Exercise scenario. No message shall be delivered out of sequence or other than as written unless specifically authorized the Lead Facility/Functional Area Controller.

Messages controlling the progress of the scenario are noted with a number and the facility designator. Contingency messages are noted with a number followed by the facility designator and the letter "X" (e.g., 1-CRX). Contingency messages are only delivered if certain conditions indicated on the message are not met.

Each onsite Controller/Evaluator will have copies of plant data sheets. Data sheets will be distributed only in the Control Room should the simulator fail.

Controller/Evaluators <u>will not provide</u> information to the players regarding scenario progression or resolution of problems encountered in the course of the simulated emergency. The Drill/Exercise participants are expected to obtain information through their own organizations and use their own judgment in determining response actions and resolving problems.

Some players may insist that certain parts of the scenario are unrealistic. The Lead Controller/Evaluators have the sole authority to clarify any questions regarding scenario content.

#### **EVALUATION PROCESS**

All evaluators shall maintain a Drill/Exercise chronology. This chronology shall be of sufficient detail to enable subsequent completion of the appropriate evaluation form. it should contain a synopsis of significant Drill/Exercise events, actions taken (or not taken) by players, questions noted, and positive as well as negative assessments made by the evaluator. This chronological record may be used to corroborate critique items that are questioned by participants.

The following Objective checklists are to be used by the appropriate Controllers/Evaluators to evaluate the Drill/Exercise.

Control Room (Simulator) Technical Support Center Operations Support Center Radiation Monitoring Team Emergency Operations Facility Dose Assessment Media Center

Each Lead Controller shall debrief the evaluators for whom he/she is responsible and compile an Objective Checklist Summary Report for the facility. Each Summary shall reflect an overall assessment of the performance of that facility in five (5) specific categories. Significant weaknesses or deficiencies shall be itemized to ensure adequate follow-up attention is devoted to resolution of the problem. Positive comments should also be included in the Summary.

The formal Post-Exercise Critique shall be conducted by the Drill/Exercise Coordinator. During the critique, each Lead Controller will provide an evaluation of his/her facility. All Controller and Participant documentation (i.e., chronologicals, checklists, attendance sheets, etc.) shall be given to the Drill/Exercise Coordinator during this meeting.

Each Controller/Evaluator will take detailed notes regarding the progress of the Drill/Exercise and response of the Drill/Exercise participants at their assigned locations. Each Controller/Evaluator should carefully note the arrival and departure times of participants, the time when major activities or milestones occur, and problem areas encountered.

The standards below should be used by the Controller to evaluate assigned areas pertaining to the emergency response. A dual purpose will be served by this rating system. First, the capability of each facility or response area will be evaluated and second, the system will provide a vehicle for guiding and directing improvement. The rating scale is as follows:

<u>Satisfactory</u> - Personnel and equipment performed as required. Any errors or problems were minor and easily correctable.

<u>Marginal</u> - Personnel and equipment generally performed as required. Any errors noted were not severe and could be corrected without undue labor or expense.

<u>Unsatisfactory</u> - Personnel and equipment generally performed below expectations and there were several significant deficiencies noted. The area's ability to carry out its functions was diminished.

<u>NA</u> - Not applicable to the situation.

#### NO - Not observed

Controller/Evaluator comments should consider the demonstration of the following facility and team evaluation elements:

#### **Facilities**

- Command and Control
- Accurate and timely determination of emergency actions levels.
- Timely activation and staffing of each emergency facility.
- Familiarity of personnel with appropriate emergency instructions, duties and responsibilities.
- Timely notification of plant, local, State and Federal personnel/agencies (information updates performed).
- Adequacy of internal information systems (i.e., message handling, displays, status boards, and maps)
  - Properly controlled documentation and accurate, timely record keeping.
  - Utilization of correct communications procedures, protocol, and techniques.
  - Capability of facility supervisor/directors to interface with personnel and coordinate facility activities.
  - Adequacy of interface between emergency response facilities.
  - Adequacy of equipment and supplies.
  - Timely initiations of onsite protective/corrective actions.
  - Development of protective action recommendations.
  - Radiological surveys and assessment of plant damage and hazardous conditions performed.
  - Timely request of emergency support services.
  - Coordinate, accurate, and orderly dissemination of information to the news media.

#### <u>Teams</u>

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- Timely notification and activation.
- Adequacy of staffing.
- Familiarity with appropriate emergency procedures, duties and responsibilities.
- Availability and utilization of proper equipment.
- Performance of contamination/decontamination control.
- Proper interface with emergency support personnel.
- Utilization of correct communications instructions and techniques.
- Availability of reference documents to team members.
- Utilization of proper radiological control practices (i.e., access control., protective clothing, shielding, stay time).
- Performance of radiological surveys.
- Timely and proper performance of damage assessment.
- Properly maintained survey records and maps.
- Adequacy of briefing sessions prior to dispatch.
- Direction and control by team leaders.
- Timely requests for offsite assistance.
- Coordination and interface between emergency response team members.
- Proper interface with plant supervisory personnel.

#### DRILL/EXERCISE OBJECTIVES

**Exercise Planning** 

- A.1 Conduct an exercise of the PNPS Emergency Plan.
- A.2 Provide an opportunity for the Commonwealth of Massachusetts to participate in an exercise.

At least partial participation is required by the Commonwealth of Massachusetts in every annual exercise conducted at the Pilgrim Station. Full participation is required at least biennially.

- A.3 Prepare an exercise information package to include:
  - a. The objectives of the exercise and appropriate evaluation criteria.
  - b. The date, time period, place and a list of participating organizations.
  - c. The simulated sequence of events.
  - d. The time schedule of real and simulated initiating events.
  - e. The narrative summary.
- A.4 Conduct a critique of the exercise.
- A.5 Prepare an Exercise report.
- A.6 Identify open items.
- A.7 Commence a drill/exercise between 1800-0400 once every <u>6</u> years.
- A.8 Conduct the exercise in various weather conditions (during different seasons).
- A.9 Conduct an unannounced drill/exercise (the knowledge of the exact date of the exercise is restricted to only non-players with a need to know) once every <u>6</u> years.
- A.10 Provide the opportunity for the Commonwealth of Massachusetts and/or the State of Rhode Island to participate in an Ingestion Pathway exercise biennially. If the Commonwealth of Massachusetts and/or the State of Rhode Island agrees to participate, conduct an Ingestion Pathway exercise.

Emergency Organizations, Support, and Resources

- B.1 Demonstrate the prompt activation, adequacy of the staffing and set up, as appropriate, of emergency response facilities as follows:
  - Control Room (CR)
  - Technical Support Center (TSC)
  - Operations Support Center (OSC)
  - Emergency Operations Facility (EOF)
  - Media Center (MC)
- B.2 Demonstrate the capability of the PNPS Emergency Response Organization to implement their Emergency Plan Implementing Procedures.
- B.3 Demonstrate the ability of the Emergency Director to provide overall direction, including "command and control" by initiating, coordinating and implementing timely and effective decisions during a radiological emergency.
- B.4 Demonstrate the ability to effectively transfer command and control of emergency response functions from the Control Room to the EOF.
- B.5 Demonstrate the ability to maintain continuous staffing of the emergency facilities.
- B.6 Demonstrate the capability of the PNPS Emergency Response Organization to interface with the Commonwealth of Massachusetts and the towns of Carver, Duxbury, Kingston, Marshfield, Plymouth, and Bridgewater; and the City of Taunton to effect a coordinated response to a radiological emergency adequate to ensure the protection of the health and safety of the public.
- B.7 Demonstrate the ability to control access to emergency facilities.
- B.8 Demonstrate the ability to provide a liaison at each participating offsite governmental emergency operations center (EOC).
- B.9 Demonstrate adequacy of facilities and equipment to support emergency operations.
- B.10 Demonstrate as appropriate, the ability to identify the need for, notify and request assistance from Federal agencies.
- B.11 Demonstrate the availability of outside organizations who may be requested to provide assistance in an emergency.
- B.12 Demonstrate the ability of corporate personnel to augment and support the plant staff.
- B.13 Demonstrate the ability to notify on-call emergency response personnel and document acceptable response times.

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#### Incident Assessment and Classification

- C.1 Demonstrate the availability of methods, equipment, and expertise to make rapid assessments of the consequences of any radiological hazards, including the dispatch and coordination of Radiation Monitoring Teams.
- C.2 Demonstrate the ability to recognize emergency action levels (EALs) and properly classify emergencies in accordance with the PNPS Emergency Plan Implementing Procedures.

#### Notification and Communications

- D.1 Demonstrate the ability to notify offsite emergency organizations within 15 minutes of each emergency classification at PNPS.
- D.2 Demonstrate the ability to notify the NRC of any emergency classification within one hour of the declaration.
- D.3 Demonstrate the ability to notify PNPS Emergency Response Organization personnel.
- D.4 Demonstrate the ability to develop and send timely follow-up information messages for offsite authorities.
- D.5 Demonstrate the communications capability between the CR, TSC, OSC, EOF, and Media Center.
- D.6 Demonstrate the communications capabilities between PNPS and the towns of Carver, Duxbury, Kingston, Marshfield, Plymouth, Bridgewater, the the City of Taunton, and the Commonwealth of Massachusetts via the Digital Notification Network (DNN). Tests need only verify operability of equipment.
- D.7 Demonstrate the availability of a back-up means of communication.
- D.8 Demonstrate the communications capabilities between PNPS and the Radiation Monitoring Teams.
- D.9 Demonstrate the operability of communication equipment between PNPS and the State of Rhode Island. Tests need only verify operability of equipment.
- D.10 Demonstrate the operability of communication equipment between the PNPS Control Room, EOF and NRC (FTS 2000). Tests need only verify operability of equipment.

#### **Radiological Consequence Assessment**

- E.1 Demonstrate methods and techniques for determining the source term of releases or potential releases of radioactive material.
- E.2 Demonstrate the adequacy of methods and techniques for determining the magnitude of the releases of radioactive materials based on plant system parameters and effluent monitors.
- E.3 Demonstrate the ability to estimate integrated dose from projected and actual dose rates and to compare these estimates with the Environmental Protection Agency (EPA) Protective Action Guides (PAGs).
- E.4 Demonstrate the ability to continuously monitor and control emergency worker radiation exposure, and implement exposure guidelines as appropriate.
- E.5 Demonstrate the capability for radiological monitoring of personnel evacuated from the Protected Area.
- E.6 Demonstrate the availability of respiratory protection, protective clothing and potassium iodide (KI) for onsite emergency response personnel.
- E.7 Demonstrate the availability of a procedural mechanism to expeditiously evaluate risks and authorize emergency workers to receive doses in excess of 10 CFR 20 limits.
- E.8 Demonstrate the capability for onsite contamination control.
- E.9 Demonstrate the ability to decontaminate onsite personnel.
- E.10 Demonstrate the capability to transport a contaminated injured person offsite.
- E.11 Demonstrate the ability to evaluate the radiation exposure, radiation uptake, and contamination levels (external) of an accident victim.
- E.12 Demonstrate the capability for onsite and offsite radiological monitoring, to include collection, analysis, and preparation for shipment of sample media (for example, water, vegetation, soil, snow and air) and provisions for communications and record keeping.
- E.13 Demonstrate the ability to collect and analyze simulated elevated airborne or liquid samples as directed.

#### Radiological Consequence Assessment (Cont.)

- E.14 Demonstrate the ability to use the Post-Accident Sampling System (PASS) to obtain fluid samples from each sample point at least once every six years. Sample points are:
  - a. Reactor Water
  - b. Torus Water
  - c. Torus Atmosphere
  - d. Drywell Atmosphere
  - e. Reactor Building Atmosphere
  - f. Main Stack Atmosphere
- E.15 Demonstrate the ability to analyze fluid samples and provide the isotopic and chemical results of the analysis within three hours of the time the sample was first requested.

Protective Action

- F.1 Demonstrate the ability to recommend protective actions to appropriate offsite authorities.
- F.2 Demonstrate the ability to advise individuals onsite or in owner controlled areas of emergency conditions.
- F.3 Demonstrate the capability to evacuate personnel from the Protected Area.
- F.4 Demonstrate that provisions exist for alternate evacuation routes and relocation centers for Station personnel.
- F.5 Demonstrate the ability to account for all individuals in the Protected Area within 30 minutes of the declaration of an evacuation.
- F.6 Demonstrate the capability for onsite first aid.
- F.7 Demonstrate the ability to conduct search and rescue procedures for persons identified as missing during accountability procedures.

Public Information

- G.1 Demonstrate the operations of the Media Center and the availability of space for the media.
- G.2 Demonstrate the ability to brief the media in a clear, accurate and timely manner.
- G.3 Demonstrate coordination of information prior to its release.
- G.4 Demonstrate the ability to establish and operate rumor control in a coordinated fashion.

## **Recovery Operations**

- H.1 Demonstrate the availability of procedures to support reentry and recovery:
  - a. De-escalation/termination from the emergency phase, and transition to the recovery phase.
  - b. Inform the Commonwealth of the opportunity to reduce the need for protective actions.
- H.2 Demonstrate the ability to activate the Recovery Organization and continue assessment and response activities.
- H.3 Demonstrate the availability of corporate technical support for planning and reentry/recovery operations.

## **ABBREVIATIONS**

| AC<br>A/E<br>EAL<br>ALARA<br>ADS<br>APRM<br>ARM<br>ATWS<br>BOC<br>BWR<br>CAM(s)<br>CFR<br>CIV<br>CTMT<br>CST<br>CRD<br>CV<br>CV<br>C/D<br>CS<br>CSCS | Alternating Current<br>Architect Engineer<br>Emergency Action Level<br>As Low As Reasonably Achievable<br>Automatic Depressurization System<br>Average Power Range Monitor<br>Area Radiation Monitor<br>Area Radiation Monitor<br>Anticipated Transient Without Scram<br>Beginning of Cycle<br>Boiling Water Reactor<br>Continuous Air Monitor(s)<br>Code of Federal Regulations<br>Combined Intermediate (Intercept) Valve<br>Containment<br>Condensate Storage Tank<br>Control Rod Drive<br>Control Valve<br>Cooldown<br>Core Spray<br>Core Standby Cooling Systems |
|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CPS<br>DOE                                                                                                                                           | Counts Per Second<br>Department of Energy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| DG<br>DC                                                                                                                                             | Diesel Generator<br>Direct Current                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                                                                                                                                                      | Drywell                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| EAL(s)<br>EBS                                                                                                                                        | Emergency Action Level(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| ECCS                                                                                                                                                 | Emergency Broadcast System<br>Emergency Core Cooling System                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| ED                                                                                                                                                   | Emergency Director                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| ENS                                                                                                                                                  | Emergency Notification System                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| EOF                                                                                                                                                  | Emergency Operations Facility                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| EPIP<br>EPZ                                                                                                                                          | Emergency Plan Implementing Procedure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| EPC                                                                                                                                                  | Emergency Planning Zone<br>Emergency Planning Coordinator                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| EPI                                                                                                                                                  | Emergency Public Information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| EOC                                                                                                                                                  | End of Cycle                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| EPA                                                                                                                                                  | Environmental Protection Agency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| FEMA<br>HP                                                                                                                                           | Federal Emergency Management Agency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| HEPA                                                                                                                                                 | Health Physics                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| HPCI                                                                                                                                                 | High Efficiency Particulate Air (Filter)<br>High Pressure Coolant Injection                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| HPN                                                                                                                                                  | Health Physics Network                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| HVAC                                                                                                                                                 | Heating, Ventilation, Air Conditioning                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| INPO                                                                                                                                                 | Institute of Nuclear Power Operations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| IRAP                                                                                                                                                 | Interagency Radiation Assistance Program                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| IRM<br>KW                                                                                                                                            | Intermediate Range Monitor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                                      | Kilowatt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

| KI<br>LCO<br>LOCA<br>LPCI<br>LPRM<br>MSIV<br>MPC<br>M-G<br>NPSH<br>NRC<br>NSSS<br>OSC<br>PCIS<br>PAG<br>PAG<br>PAG<br>PASS<br>PIO<br>RBCCW<br>RMT<br>RCC<br>RECIRC<br>RECIRC<br>RFP<br>RPV<br>RPS<br>RVCU<br>RHR<br>RPS<br>RWCU<br>RHR<br>RPM<br>RPIS<br>SRV<br>SAS<br>SRO<br>SDV<br>SRM<br>S/D<br>SBGT<br>SBLC<br>SJAE<br>SV<br>TSC | Potassium lodide<br>Limiting Condition of Operation<br>Loss of Coolant Accident<br>Low Pressure Coolant Injection<br>Local Power Range Monitor<br>Main Steam Isolation Valve<br>Maximum Permissible Concentration<br>Motor-Generator<br>Net Positive Suction Head<br>Nuclear Regulator Commission<br>Nuclear Steam Supply System<br>Operations Support Center<br>Primary Containment Isolation System<br>Protective Action Guide<br>Post Accident Sampling System<br>Public Information Officer<br>Reactor Building Closed Cooling Water<br>Radiation Monitoring Team<br>Reactor Core Isolation Cooling<br>Reactor Recirculation System<br>Reactor Feed Pump<br>Reactor Pressure Vessel<br>Reactor Protection System<br>Reactor Water Cleanup<br>Residual Heat Removal<br>Revolutions Per Minute<br>Rod Position Information System<br>Safety Relief Valve<br>Secondary Alarm System<br>Senior Reactor Operator<br>Scram Discharge Volume<br>Source Range Monitor<br>Shutdown<br>Standby Gas Treatment System<br>Standby Liquid Control<br>Steam jet Air Ejector<br>Stop Valve<br>Technical Support Center |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SJAE                                                                                                                                                                                                                                                                                                                                 | Standby Liquid Control<br>Steam jet Air Ejector                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| TSC                                                                                                                                                                                                                                                                                                                                  | Technical Support Center                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| TAF<br>TIP                                                                                                                                                                                                                                                                                                                           | Top of Active Fuel<br>Traversing Incore Probe                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| TBCCW<br>TB                                                                                                                                                                                                                                                                                                                          | Turbine Building Closed Cooling Water<br>Turbine Building                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| TAG                                                                                                                                                                                                                                                                                                                                  | Technical Assessment Group                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

## **OPERATION OF THE CONTROLLER NETWORK**

The controller network is designed to give the controllers the ability to communicate between facilities without interfering with normal Drill/Exercise communications.

Calls on the network can be made between the EOF and each of the other PNPS emergency facilities. We do not have the ability to conduct conference calling.

## LISTING OF TELEPHONE NUMBERS

#### **LOCATION**

#### **NUMBER**

Simulator Simulator Instructor Facility Control room (CR) Technical Support Center (TSC) Operations Support Center (OSC) Media Center (MC) 7699,7512 3019,7654 8460 8738 8726 617-424-5619

## DIALING INSTRUCTIONS TO THE EOF LEAD CONTROLLER

| FROM                                | <u>T0</u>                | OFFICE<br><u>NUMBER</u>                                    | PORTABLE<br>NUMBER                                         |
|-------------------------------------|--------------------------|------------------------------------------------------------|------------------------------------------------------------|
| CR<br>SIMULATOR<br>TSC<br>OSC<br>MC | EOF<br>EOF<br>EOF<br>EOF | 73+6663<br>73+6669<br>73+6664<br>73+6665<br>(508) 732-6666 | 73+6671<br>73+6671<br>73+6671<br>73+6671<br>(508) 732-6671 |

## DIALING INSTRUCTIONS TO INDIVIDUAL FACILITIES

| FROM               | <u>T0</u>    | NUMBER             |
|--------------------|--------------|--------------------|
| CR, TSC, OSC, EOF, | PRU          | (617) 424-XXXX     |
| PRU                | CR, TSC, OSC | (508) 732/830-XXXX |

# PILGRIM NUCLEAR POWER STATION

| TYPE/NO:                      | Evaluated Exercise                     | 99-06            | DATE:       | 12/07/99        |
|-------------------------------|----------------------------------------|------------------|-------------|-----------------|
| LOCATION:                     | <u>.</u>                               |                  | TIME:       |                 |
| <u>NAME</u><br>(Please Print) |                                        | <u>SIGNATURE</u> | SOC. SEC. # | PLAYER POSITION |
|                               |                                        |                  |             |                 |
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## **Emergency Preparedness Function Attendance Sheet**

# DRILL/EXERCISE CHRONOLOGY RECORD

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| Drill/Exercise<br>or Evaluator I | Controller<br>Name:                                    | Date:                     | 12/7/99           |
|----------------------------------|--------------------------------------------------------|---------------------------|-------------------|
| Drill/Exercise                   | Number: Evaluated Exercise                             | 99-06                     |                   |
| Assigned Loc                     | ation and Function:                                    |                           |                   |
| 1. Drill contro<br>during the    | ollers and evaluators use this shee<br>drill/exercise. | et to record important ev | ents and comments |
| 2. The notes<br>Evaluatior       | on this sheet should be used whe<br>Report Sheet.      | en completing the Contro  | oller/Observer    |
|                                  |                                                        |                           | Page 1 of         |
| <u>Time</u>                      | <u> </u>                                               | vent/Comments             |                   |
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# DRILL/EXERCISE CHRONOLOGY RECORD

| Drill/Exercise | Controller | or Evaluator Name |  |
|----------------|------------|-------------------|--|
|                |            |                   |  |

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<u>12/7/99</u> Date

Page \_\_\_\_ of \_\_\_

| Time    | Event/Comments |
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# Entergy Pilgrim Nuclear Power Station Emergency Preparedness

## ONSITE DRILL/EXERCISE FACILITY LEAD CONTROLLER DEBRIEFING SUMMARY

| TSC, EOF, MC, CIC, CSC) | Date:                                                                                                                                                                                                                              | 12/07/99                                                                                                                                                                                                                                                  |                                                                                             |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
|                         | Drill/Exercise No.                                                                                                                                                                                                                 | 99-06                                                                                                                                                                                                                                                     |                                                                                             |
| Comments:               |                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                           | No                                                                                          |
|                         |                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                           |                                                                                             |
| procedures?             |                                                                                                                                                                                                                                    | Yes                                                                                                                                                                                                                                                       | No                                                                                          |
|                         |                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                           | ····                                                                                        |
| -                       | -                                                                                                                                                                                                                                  | Yes                                                                                                                                                                                                                                                       | No                                                                                          |
|                         |                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                           |                                                                                             |
| in a timely manner?     | sonnel activate the facilities                                                                                                                                                                                                     | Yes                                                                                                                                                                                                                                                       | No<br>No                                                                                    |
| MC, CIC within 2 hours  |                                                                                                                                                                                                                                    | Yes                                                                                                                                                                                                                                                       | No                                                                                          |
|                         | Comments:<br>Did players perform their dutie<br>procedures?<br>Comments:<br>Were there equipment or facili<br>Comments:<br>Did Emergency Response persin a timely manner?<br>TSC, OSC, EOF within 1 hour<br>MC, CIC within 2 hours | Comments: Did players perform their duties and utilize applicable procedures? Comments: Were there equipment or facility deficiencies? Comments: Did Emergency Response personnel activate the facilities in a timely manner? TSC, OSC, EOF within 1 hour | Were all drill/exercise objectives for your facility/group met?       Yes         Comments: |

# Entergy Pilgrim Nuclear Power Station Emergency Preparedness

| 5. | Were dose assessment functions accomplished<br>in and accurate and timely manner?<br>Comments:                                                                                                            | Yes               | No             | N/A        |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----------------|------------|
|    |                                                                                                                                                                                                           |                   | *····          |            |
| 6. | Were communications adequate and were they done<br>in a timely manner<br>Initial notifications made within 15 minutes<br>Followup notifications made hourly<br>Comments:                                  | Yes<br>Yes<br>Yes | No<br>No<br>No | N/A<br>N/A |
| 7. | Was command and control demonstrated adequately?<br>Did the Facility Leader maintain command<br>and control of the facility by initiating, coordinating,<br>and implementing timely and effective actions | Yes<br>Yes        | No             |            |
|    | Did the facility leader hold timely and informative<br>staff briefings?<br>Comments:                                                                                                                      | Yes               | No             | ·          |
| 8. | Were there major problems encountered?<br>Comments:                                                                                                                                                       | Yes               | No             |            |
| 9. | Do you have other comments or areas for improvement?                                                                                                                                                      |                   |                |            |
|    |                                                                                                                                                                                                           |                   |                |            |

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