System: ADMIN Time Critical: No Applicability: RO/SRO

**Safety Function: Conduct of Operations** 

Setting: ADMIN, New

Validated: Yes, average time 15 minutes References: NOP-OP-1005, PDB Tab A

Tasks: Evaluate conditions to determine time to boil and time to core uncovery.

K / A Data: 2.1.25 Ability to obtain and interpret station reference materials such as graphs / monographs / and tables which contain performance data.

- 1. Simulator Setup Instructions: NA
- 2. <u>Location / Method</u>: Simulator or Control Room / Administrative performance.
- 3. <u>Initial Condition:</u> Day 25 of Refueling Outage 10. Reactor vessel reassembly is in progress after refueling completed. Current Reactor level band is 355 to 360 inches for setting the vessel head. The backup decay heat removal system is unavailable. Thirty minutes ago RHR B tripped with Reactor water temperature of 90 degrees. Operations and maintenance personnel are attempting to determine cause.
- 4. <u>Initiating Cue</u>: No decay heat removal systems are in service or currently available. The Shift Manager directs you to calculate Time to Boil and Time to Core Uncovery, per NOP-OP-1005 Shutdown Safety.

INITIAL CONDITIONS:	Day 25 of Refueling Outage 10. Reactor vessel reassembly is in progress after refueling completed. Current Reactor level band is 355 to 360 inches for setting the vessel head. The backup decay heat removal system is unavailable. Thirty minutes ago RHR B tripped with Reactor water temperature of 90 degrees. Operations and maintenance personnel are attempting to determine cause.
INITIATING CUE:	No decay heat removal systems are in service or currently available. The Shift Manager directs you to calculate Time to Boil and Time to Core Uncovery, per NOP-OP-1005 Shutdown Safety.

Standard:	Performer obtains or simulates obtaining all materials, procedures, tools, keys, radios, etc before performing task.		
Standard:	Performer follows management expectations with regards to safety and communication standards.		
Step	1		
	Operator obtain	ns curves for Time to Boil PDB-A0017 and Time to Core Uncovery PDB-0019.	
	Critical Step:	Operator obtains correct curves, PDB-0017 page 8 and PDB-0019 page 8.	
	<b>Instructor Cue:</b>	None	
	Notes:	None	
	SAT	UNSAT	
	Comment(s):		
Step	2		
	Operator deter	rmines Time to Boil.	
	<b>Critical Step:</b>	Operator determines Time to Boil is 8.5 to 9 hours.	
	<b>Instructor Cue:</b>	None	
	Notes:	Day 25 of outage with initial temp of 90 degrees. After core alteration and with vessel level at	
	SAT	flange. UNSAT	
	Comment(s):		

**Evaluation Results:** 

<b>Step</b>	<u>3</u>			
	Operator determines Time to Boil.			
	<u>Critical Step</u> : Operator determines Time to Core Uncovery is 44 to 48 hours.			
	<b>Instructor Cue:</b>	None		
	Notes:	Day 25 of outage with initial temp of 90 degrees. After core alteration and with vessel level at flange.		
	SAT			
	Comment(s):			
Step	<u>4</u>			
	Operator repor	ts results to Shift Manager.		
	Standard:	Operator reports times to Shift Manager.		
	<b>Instructor Cue:</b>	None		
	Notes:	None		
	SAT	UNSAT		
	Comment(s):			
<b>Terminating Cue:</b> Time to Boil and Time to Core Uncovery reported to Shift Manager.				

SAT\_\_\_\_ UNSAT\_\_\_\_

System: P54 Time Critical: No Applicability: RO

**Safety Function: Conduct of Operations** 

**Setting: ADMIN, New** 

Validated: Yes, average time 25 minutes

References: PAP-1910, Drawing 914-0001-0000 Fire Service Yard Area

Tasks: Isolate System Leak and Evaluate Affect on P54 system and Plant Operation

K / A Data: 2.1.24 Ability to obtain and interpret station electrical and mechanical drawings. 2.1.28 Knowledge of purpose and function of major system components and controls.

- 1. Simulator Setup Instructions: NA
- 2. <u>Location / Method</u>: Simulator or Control Room / Administrative performance.
- 3. <u>Initial Condition</u>: Reports from field indicate that P54F3554 Motor to Diesel Fire Pump Xconn Supply to Ring has a thru wall pipe rupture. SRO has ordered all Fire Pumps shutdown to secured status per SOI-P54 Water.
- 4. <u>Initiating Cue</u>: Unit Supervisor directs you to determine how P54F3554 can be isolated. What Fire Protection Functional Specifications is the plant currently in per PAP-1910.

INITIAL CONDITIONS:	Reports from field indicate that P54F3554 Motor to Diesel Fire Pump Xconn Supply to Ring has a thru wall pipe rupture. SRO has ordered all Fire Pumps shutdown to secured status per SOI-P54 Water.
INITIATING CUE:	Unit Supervisor directs you to determine how P54F3554 can be isolated. What Fire Protection Functional Specifications is the plant currently in per PAP-1910.

Standard:	Performer obtains or simulates obtaining all materials, procedures, tools, keys, radios, etc before performing task.
Standard:	Performer follows management expectations with regards to safety and communication standards.

## Step 1

Leak Isolation, Drawing 914-0001-0000 Rev LL, Fire Service Yard Area

Critical Step:	Operator obtains drawing and determines that P54F3552, P54F3555 and P54F6371 will in	solate
----------------	--	--------

P54F3554.

**Instructor Cue:** None

Notes: P54F3554 coordinates are F4, P54F3552 coordinates H2, P54F3555 coordinates F4 and

P54F6371 C3.

SAT \_\_\_ UNSAT \_\_\_

Comment(s):

## Step 2

Fire Protection Functional Specifications: Refer to PAP-1910 Fire Protection Program Current Specification, prior to isolation and restoration:

1. Attachment 3 section 3A Fire Suppression Water Supply

step D.2.a(1) or a(2) Both Fire Pumps are not Functional

Critical Step: Determines that Both fire pumps are not functional, a(1) 24 hours to establish backup system

or a(2) LCO 3.0.3.

**Instructor Cue:** None

**Notes:** PAP 1910 page 65 and 66, with both pumps in secured status, pumps are not functional.

SAT \_\_\_ UNSAT \_\_\_

Comment(s):

Fire Protection Functional Specifications: Refer to PAP-1910 Fire Protection Program

Current Specification, prior to isolation and restoration:

2. Attachment 3 section 4A Fire Mains and Headers

step D.1.a or b Fire Main is not Functional, no pumps

Standard:

a. 1 hour verify flow path exists, b. 24 hours to establish back up system

Instructor Cue: Fire Marshall is working on the necessary compensation for each individual system per the note on page 69 and 70.

Notes: PAP-1910 page 69 and 70, Fire Pump spec more limiting

SAT \_\_\_\_ UNSAT \_\_\_

Comment(s):\_\_\_\_\_

**Terminating Cue:** Unit Supervisor has the valves needed to isolate the leak and the correct Functional Specifications for the loss of Fire Suppression Equipment.

Evaluation Results: SAT\_\_\_\_ UNSAT\_\_\_\_

System: ADMIN Time Critical: YES Applicability: SRO

**Safety Function: Conduct of Operations** 

Setting: ADMIN, New

Validated: Yes, average time 20 minutes

References: FITS Qualification Matrix, NOP-OP-1002, and Tech Specs Section 5.0

Tasks: Staff oncoming shift for minimum manning per the guidelines in NOP-OP-1002.

K / A Data: 2.1.4 Knowledge of Shift Staffing Requirements.

2.1.5 Ability to locate and use procedures and directives related to shift staffing and activities.

- 1. <u>Simulator Setup Instructions</u>: NA
- 2. <u>Location / Method</u>: Simulator or Control Room / Administrative performance.
- 3. <u>Initial Condition:</u> The plant is operating at 100% power and grid risk is RED. Schedule adjustments are in progress due to coming out of a forced outage. The following are the personnel scheduled in for the oncoming shift: RO's Cross, Roniger and Evans. NLO's Rarick, Cowger, Roth, Rigden and Furmanek, Fire Technician Vollman.
- 4. Initiating Cue: As the Unit supervisor staff the oncoming shift.

INITIAL CONDITIONS:	The plant is operating at 100% power and grid risk is RED. Schedule adjustments are in progress due to coming out of a forced outage. The following are the personnel scheduled in for the oncoming shift: RO's Cross, Roniger and Evans. NLO's Rarick, Cowger, Roth, Rigden and Furmanek, Fire Technician Vollman.
INITIATING CHE.	As the Unit supervisor staff the encoming shift
INITIATING CUE:	As the Unit supervisor staff the oncoming shift.

Standard:	Performer obtains or simulates obtaining all materials, procedures, tools, keys, radios, etc before performing task.
Standard:	Performer follows management expectations with regards to safety and communication standards.

## Step 1

Determine what positions need filled. NOP-OP-1002

Safe Shutdown (SSE	))			
Perry				
SM (SRO) US (SRO) Reactor Ope Non-License Shift Engine Radwaste To	ed Operator SSD er echnician ics Technician echnician	MODE 1, 2 & 3 1 1 2 2 2 1 1 1 1	MODE 4 & 5  1  None 1 1 None 1 1 1 1 1	
Fire Brigade Fire Brigade Security Per  Fire Brigade Lead knowledge of plan systems familiarit Fire Brigade Mem individuals.	Leader <sup>1</sup> Members <sup>2</sup> sonnel der (FBL) – Reactor Op nt safety related systen	ns (simulator certifica and two other Fire B	1 4 ** rith equivalent ation with plant	
Critical Step: Instructor Cue:	Determine what pos Brigade members a None			Brigade Leader, 2 SSD's, 4 Fire
Notes:	Fire Brigade is 1 Ro	O, 1 Fire Tech and 3	3 NLO's	
<b>SAT</b>	UNSAT			
Comment(s):				

	Determine qua	alifications of available personnel using FITS qualification matrix.				
	For Reactor O	For Reactor Operator: Cross, Roniger and Evans are qualified.				
	Fire Brigade Leader: Evans is qualified.					
	Fire Brigade: Vollman, Rarick, and Cowger are qualified.					
	SSD: Rarick, O	Cowger, Roth, Rigden and Furmanek are qualified.				
	Critical Step:	Determines qualification of available personnel.				
	<b>Instructor Cue:</b>	Direct use of FITS Qualification Matrix.				
	Notes:	None				
	SAT	UNSAT				
	Comment(s):					
<u>Step</u>	<u>13</u>					
	For the Reacto	or Operator positions:				
	Fire Brigade le	eader position:				
	Critical Step:	Evans must be Fire Brigade Leader. Cross and Roniger will be Control Room Operators.				
	<b>Instructor Cue:</b>	None				
	Notes:	Evans can not be ATC and Brigade Leader.				
	SAT	UNSAT				
	Comment(s):					
Step	<u>• 4</u>					
	For the Safe S	hutdown positions:				
	Critical Step:	Assigns two to safe shutdown position, Roth, Rigden and/or Furmanek are qualified for Safe				
	<b>Instructor Cue:</b>	Shutdown position. None				
	Notes:	Rarick and Cowger are qualified Safe Shutdown but they are the only qualified fire brigade				
	SAT	members beside Vollman.  UNSAT				
	Comment(s):					

**Evaluation Results:** 

# For Fire Brigade positions: Critical Step: Assigns Vollman, Rarick and Cowger. Determines that they need one additional fire brigade qualified person. Instructor Cue: No other qualified fire brigade members are oncoming, no security personnel are qualified. Notes: None SAT \_\_\_ UNSAT \_\_\_ Comment(s):\_\_\_\_\_ Terminating Cue: Assigns positions for oncoming crew based on qualifications and determines that an additional fire brigade person is needed.

SAT\_\_\_\_ UNSAT\_\_\_\_

System: C11 Time Critical: No Applicability: RO

**Safety Function: Equipment Control** 

**Setting: ADMIN, New** 

Validated: Yes, average time 30 minutes

References: SVI-C11-T1006, Tech Spec 3.1.3 and 3.1.4

Tasks: Evaluate Scram Time Data from SVI-C11-T1006 and report to Unit Supervisor. Evaluate Technical Specifications and include in report to Unit Supervisor.

K / A Data: 2.2.12 Knowledge of Surveillance Procedures.

- 1. <u>Simulator Setup Instructions</u>: NA
- 2. <u>Location / Method</u>: Simulator or Control Room / Administrative performance.
- 3. <u>Initial Condition:</u> Plant in Mode 4. Vessel Hydro completed along with scram time testing per SVI-C11-T1006. Time events analyzer was used to time control rods.
- 4. <u>Initiating Cue</u>: Unit Supervisor directs you to evaluate Time Events Analyzer data sheet for scram time testing per section 5.1.3 using attachment 1. Complete SVI-C11-T1006 data sheets column 5.1.3.1.

INITIAL CONDITIONS:	Plant in Mode 4. Vessel Hydro completed along with scram time testing per SVI-C11-T1006. Time events analyzer was used to time control rods.
INITIATING CUE:	Unit Supervisor directs you to evaluate Time Events Analyzer data sheet for scram time testing per section 5.1.3 using attachment 1. Complete SVI-C11-T1006 data sheets column 5.1.3.1.

Standard:	Performer obtains or simulates obtaining all materials, procedures, tools, keys, radios, etc before performing task.
Standard:	Performer follows management expectations with regards to safety and communication standards.

#### Step 1

SVI-C11-T1006 step 5.1.3.1.a: Evaluate speed per one of the following,

If using the time events analyzer, confirm the scram time(s) <Max\_Time(s) calculated per Attachment 1 or by using the following limiting Value(s):

	Limiting
Notch	Max Time (sec)
13	0.94
13	1.13
43	0.30
29	0.78
13	1.40
	13 13 43 29

<u>Critical Step:</u> Calculate Scram time values per attachment 1 for a reactor pressure of 1010 psig.

**Instructor Cue:** Initial cue was to use attachment 1.

**Notes:** Test completed at 1010 psig, can use limiting values listed for some rods but will need to

complete attachment 1. Notch 43 time is .306, Notch 29 time is .816. and Notch 13 time is

1.478.

SAT \_\_\_ UNSAT \_\_\_

Comment(s):\_\_\_\_

SVI-C11-T1006 step 5.1.3.1.a: Evaluate speed per one of the following,

If using the time events analyzer, confirm the scram time(s) <Max\_Time(s) calculated per Attachment 1 or by using the following limiting Value(s):

Reactor Pressure (psig) 1010	Notch 43 29 13	Limiting Max Time (sec) 0.31 0.82 1.48
<u>Critical Step</u> :  Instructor Cue:	Evaluate Scram Time Data and dete Rod 50-23 is inoperable None	ermines rod 18-55 and 50-43 are slow.
Notes:	Cue was to use attachment 1.	
<b>SAT</b>	UNSAT	

## Step 3

SVI-C11-T1006 step 5.1.3.1.b:

If test performed to satisfy Technical Specification SR 3.1.4.2, review all slow rods to the representative sample plan and confirm no more than 20% of the control rods in the representative sample are "slow,"

or

expand the sample size until either this 20% criterion is satisfied or the total number of "slow" control rods (throughout the core, from all surveillances) exceeds the LCO limit. <Technical Specification BASES SR 3.1.4.2>

Standard:	Confirms less than 4 rods are slow.
<b>Instructor Cue:</b>	None
Notes:	20% of 20 is 4, 2 rods are slow and one is inoperable.
SAT	UNSAT
Comment(s):	

SVI-C11-T1006 step 5.1.3.1.b:

If the rod fails to scram on the first attempt or if the scram time to position 13 is >7 seconds, immediately declare it INOPERABLE, fully insert it, and comply with the applicable Technical Specification CONDITIONS and REQUIRED ACTION statements. <B00806>

<b>Critical Step:</b>	Informs Unit Supervisor rod 50-23 is inoperable.
<b>Instructor Cue:</b>	Will generate PLCO and work order for rod 50-23.
Notes:	Scram Time 7.5 seconds to position 13.
<b>SAT</b>	UNSAT
Comment(s):	
Step 5	
SVI-C11-T1006 step 5	.1.3.1.d:
	the first attempt, immediately declare it as such and comply with pecification CONDITIONS and REQUIRED ACTION statements.
<b>Critical Step</b> :	Informs Unit supervisor of 2 slow rods.
<b>Instructor Cue:</b>	Will generate PLCO and work order for rods 18-55 and 50-43.
Notes:	None
SAT	UNSAT

Comment(s):

Ste	<u>) 6</u>		
SVI	-C11-T1006:		
Con	npletes attachment 4	4 columns 5.1.3.1.	
	Standard:	Complete columns 5.1.3.1 with SAT for all rods but the two slow rods and	l one inoperable rod
	<b>Instructor Cue:</b>	None	
	Notes:	None	
	SAT	UNSAT	
	Comment(s):		
	_	Evaluation of scram time data is completed and the Unit Supervisor has w rods and one inoperable rod.	s been
Eva	luation Results:	: SAT UNSAT	

System: C11 Time Critical: No Applicability: SRO

**Safety Function: Equipment Control** 

**Setting: ADMIN, New** 

Validated: Yes, average time 35 minutes

References: SVI-C11-T1006, Tech Spec 3.1.3 and 3.1.4

Tasks: Evaluate Scram Time Data from SVI-C11-T1006 and report to Unit Supervisor. Evaluate Technical Specifications and include in report to Unit Supervisor.

K / A Data: 2.2.12 Knowledge of Surveillance procedures. 2.2.23 Ability to Track Limiting Conditions for Operations.

- 1. <u>Simulator Setup Instructions</u>: NA
- 2. <u>Location / Method</u>: Simulator or Control Room / Administrative performance.
- 3. <u>Initial Condition:</u> Plant in Mode 4. Vessel Hydro completed along with scram time testing per SVI-C11-T1006. Time events analyzer was used to time control rods.
- 4. <u>Initiating Cue</u>: As the Unit Supervisor evaluate Time Events Analyzer data sheet for scram time testing per section 5.1.3 using attachment 1. Complete SVI-C11-T1006 data sheets column 5.1.3.1. Identify any Technical Specification that may need a LCO and complete LCO paperwork.

INITIAL CONDITIONS:	Plant in Mode 4. Vessel Hydro completed along with scram time testing per SVI-C11-T1006. Time events analyzer was used to time control rods.
INITIATING CUE:	As the Unit Supervisor evaluate Time Events Analyzer data sheet for scram time testing per section 5.1.3 using attachment 1. Complete SVI-C11-T1006 data sheets column 5.1.3.1. Identify any Technical Specification that may need a LCO and complete LCO paperwork.

Standard:	Performer obtains or simulates obtaining all materials, procedures, tools, keys, radios, etc before performing task.
Standard:	Performer follows management expectations with regards to safety and communication standards.

#### Step 1

SVI-C11-T1006 step 5.1.3.1.a: Evaluate speed per one of the following,

If using the time events analyzer, confirm the scram time(s) <Max\_Time(s) calculated per Attachment 1 or by using the following limiting Value(s):

Reactor Pressure		Limiting
(psig)	Notch	Max Time (sec)
0 to 600, inclusive	13	0.94
600 to 950	13	1.13
950 to 1050, inclusive	43	0.30
	29	0.78
	13	1.40

<u>Critical Step</u>: Calculate Scram time values per attachment 1 for a reactor pressure of 1010 psig.

**Instructor Cue:** Initial Cue directed use of attachment 1.

**Notes:** Test completed at 1010 psig, can use limiting values listed for some rods but will need to

complete attachment 1. Notch 43 time is .306, Notch 29 time is .816 and Notch 13 time is

1.478.

SAT \_\_\_ UNSAT \_\_\_

Comment(s):\_\_\_\_

SVI-C11-T1006 step 5.1.3.1.a: Evaluate speed per one of the following,

If using the time events analyzer, confirm the scram time(s) <Max\_Time(s) calculated per Attachment 1 or by using the following limiting Value(s):

Reactor Pressure		Limiting
(psig)	Notch	Max Time (sec)
1010	43	0.31
	29	0.82
	13	1.48
<u>Critical Step</u> : Instructor Cue:	Evaluate Scram Time Data a Rod 50-23 is inoperable None	and determines rod 18-55 and 50-43 are slow.
Notes:	Attachment 1 directed.	
SAT	UNSAT	

## Step 3

SVI-C11-T1006 step 5.1.3.1.b:

If test performed to satisfy Technical Specification SR 3.1.4.2, review all slow rods to the representative sample plan and confirm no more than 20% of the control rods in the representative sample are "slow,"

or

expand the sample size until either this 20% criterion is satisfied or the total number of "slow" control rods (throughout the core, from all surveillances) exceeds the LCO limit. <Technical Specification BASES SR 3.1.4.2>

Standard:	Confirms less than 4 rods are slow.
<b>Instructor Cue:</b>	None
Notes:	20% of 20 is 4, 2 rods are slow and one is inoperable.
SAT	UNSAT
Comment(s):	

SVI-C11-T1006 step 5.1.3.1.b:

If the rod fails to scram on the first attempt or if the scram time to position 13 is >7 seconds, immediately declare it INOPERABLE, fully insert it, and comply with the applicable Technical Specification CONDITIONS and REQUIRED ACTION statements. <B00806>

<b>Critical Step:</b>	Generates PLCO for rod 50-23 against Tech Spec 3.1.3.	
<b>Instructor Cue:</b>	None	
Notes:	Scram Time 7.5 seconds to position 13.	
SAT	UNSAT	
Comment(s):		
<u>Step 5</u>		
SVI-C11-T1006 step 5.	1.3.1.d:	
	he first attempt, immediately declare it as such and comply with ecification CONDITIONS and REQUIRED ACTION statements.	
<b>Critical Step:</b>	Generates PLCO for rods 18-55 and 50-43 against Tech Spec 3.1.4.	
<b>Instructor Cue:</b>	None	
Notes:	None	
SAT	UNSAT	

Comment(s):\_\_\_\_

## OT-3701-C11\_14SRO

Step 6	
SVI-C11-T1006:	
Completes attachment 4	columns 5.1.3.1.
Standard:	Complete columns 5.1.3.1 with SAT for all rods but the two slow rods and one inoperable rod.
Instructor Cue:	None
Notes:	None
SAT	UNSAT
Comment(s):	
<b>Terminating Cue:</b> Exand 3.1.4.	valuation of scram time data is completed and PLCO's written for Tech Spec 3.1.3
<b>Evaluation Results:</b>	SAT UNSAT

System: Administrative Time Critical: No Applicability: RO/SRO

**Safety Function: Radiation Control** 

**Setting: ADMIN, New** 

Validated: Yes, average time 20 minutes

References: HPI-B3, PAP-0114, SVI-G33-T2002A

Tasks: Calculate expected exposure and determine not going to exceed quarterly limit.

K / A Data: 2.3.4 Knowledge of radiation exposure limits including permissible levels in excess of those authorized.

- 1. Simulator Setup Instructions: NA
- 2. <u>Location / Method</u>: Simulator or Control Room / Administrative performance.
- 3. <u>Initial Condition</u>: Plant is in a December refueling outage. SVI-G33-T2002A is scheduled for performance and is on critical path. Your year to date dose is 750 mrem.
- 4. <u>Initiating Cue</u>: You are assigned to complete SVI-G33-T2002A. Section 5.1.1 will take you 10 minutes and section 5.1.2 will take you 25 minutes up until step 14. Step 14 will require 10 minutes and the final field steps of 5.1.2 will require an additional 5 minutes. Calculate expected dose and fill out dose extension form if you will be within 10% of your quarterly limit.

INITIAL CONDITIONS:	Plant is in a December refueling outage. SVI-G33-T2002A is scheduled for
	performance and is on critical path. Your year to date dose is 750 mrem.
INITIATING CUE:	You are assigned to complete SVI-G33-T2002A. Section 5.1.1 will take you 10 minutes and section 5.1.2 will take you 25 minutes up until step 14. Step 14 will
	require 10 minutes and the final field steps of 5.1.2 will require an additional 5 minutes. Calculate expected dose and fill out dose extension form if you will be within 10% of your quarterly limit.

Standard: Performer obtains or simulates obtaining all materials, procedures, tools, keys, radios, etc... before performing task.

Standard: Performer follows management expectations with regards to safety and communication standards.

#### Step 1

Determine the specific work location and dose rate information from SVI-G33-T2002A and Survey Map ST614.

<u>Critical Step:</u> Work location determination is at valve 1G33F051B and drain valves 1G33F058 and F057.

Dose rate at 1G33F051B is 120 mr/hr, and at drain valves 160 mr/hr.

**Instructor Cue:** Give operator SVI-G33-T2002A, when survey map for steam tunnel is requested provide

Survey Map.

Notes: None

SAT \_\_\_ UNSAT \_\_\_

Comment(s):\_\_\_\_\_

## Step 2

Calculate dose estimate.

<u>Critical Step:</u> 20 minutes at G33F051B at 120 mr/hr = 120/60 = 2.0 mr/min \* 20 = 40 mrem.

30 minutes at G33F057/58 at 160 mr/hr = 180/60 = 3.0 mr/min \* 30 = 90 mrem.

**Instructor Cue:** None

**Notes:** Total Dose estimate should be about 130 mrem. If Operator uses G33F051A instead of B total

dose will be 170 mrem.

SAT \_\_\_ UNSAT \_\_\_

Comment(s):\_\_\_\_

Complete Increased Dose Control Level Authorization form # 6639, per HPI-B3.

<u>Critic</u>	eal Step:	Determines that 10% of quarterly limit is 900 mrem, and that a dose extension is not required.
Instru	uctor Cue:	If contacted as Radiation Protection, inform Operator that form is 6639 and instruction is HPI-B3.
Notes	:	10% of quarterly limit is 900 mr/hr, so dose extension request will not be required.
SAT		UNSAT
Comn	nent(s):	
Terminati	ing Cue: D	ose estimated is less than 900 mrem.
Evaluation	n Results:	SAT UNSAT

**System: ADMIN** 

Time Critical: YES, 15 minutes

**Applicability: SRO** 

Safety Function: Emergency Procedures/Plan

**Setting: ADMIN, New** 

Validated: Yes

References: EPI-A1, EPI-A2, and EPI-B1

Tasks: Verify Initial Notification and Pager Message forms are complete prior to notifications.

K / A Data: 2.4.40 Knowledge of the SRO's responsibilities in emergency plan implementation. 2.4.41 Knowledge of emergency action level thresholds and classifications.

- 1. Simulator Setup Instructions: NA
- 2. <u>Location / Method</u>: Simulator or Control Room / Administrative performance.
- 3. <u>Initial Condition:</u> **TIME CRITICAL JPM**. Fuel Bundle was dropped in the FHB with clad damage. FHB D21 monitors have valid high radiation alarms. FHB D17 has a high alarm and gas channel is pegged high. The Plant Vent Gas channel 1D17K786 is offscale high. The Plant Vent Accident Gas Channel 1D19K300 is reading .40 μCi/cc. CADAP run is complete and attached for review. The Shift Manager has completed the Initial Notification and Pager Forms.
- 4. <u>Initiating Cue</u>: **TIME CRITICAL JPM**. The Shift Manager requests you to review Initial Notification and Pager Message forms prior to transmittal. **Notification is due in 15 minutes**.

INITIAL CONDITIONS:	TIME CRITICAL JPM. Fuel Bundle was dropped in the FHB with clad damage. FHB D21 monitors have valid high radiation alarms. FHB D17 has a high alarm and gas channel is pegged high. The Plant Vent Gas channel 1D17K786 is offscale high. The Plant Vent Accident Gas Channel 1D19K300 is reading .40 $\mu$ Ci/cc. CADAP run is complete and attached for review. The Shift Manager has completed the Initial Notification and Pager Forms.
INITIATING CUE:	TIME CRITICAL JPM. The Shift Manager requests you to review Initial Notification and Pager Message forms prior to transmittal. Notification is due in 15 minutes.

Standard:	Performer obtains or simulates obtaining all materials, procedures, tools, keys, radios, etc before performing task.
Standard:	Performer follows management expectations with regards to safety and communication standards.

## Step 1

Evaluate Event Classification: EPI-A1

Initiating Conditions	Entry C	riteria
HS1  Site Boundary dose resulting from an actual or imminent release of gaseous radioactivity that exceeds 100 mRem TEDE dose OR 500 mRem CDE Child Thyroid dose for the actual or projected duration of the release	A valid indication greater than the listed reading for one or more of the following plant gaseous effluent menitors:  • PLANTVENTGAS 1D19-K300 3.8E-1 μCi/cc • OG VENT GAS 1D19-K400 2.2E0 μCi/cc • TB/HB VENT GAS 1D17-K856 1.6E4 εpm • PLANTVENTGAS 2D19-K300 6.0E-1 μCi/cc	Emergency dose calculations, using actual meteorology indicate that one or more of the following are met at the Site Boundary:  • Greater than 100 mRem TEDE • Greater than 500 mRem CDE Child Thyroid
Applicable Modes:	Emergency dose calculations <u>CANNOT</u> confirm, within 15 minutes of exceeding limit, that levels at the Site Boundary are less than 100 mRem TEDE and 500 mRem CDE Child Thyroid dose using actual meteorology.	

<u>Critical Step</u> :	HS1, is met. Column 1 1D19K300 is greater than value listed. CADAP complete. Go to column two, TEDE at SB is 104 mRem, meet requirement for greater than 100 mRem TEDE.
<b>Instructor Cue:</b>	CADAP is in Rem must convert to mRem. None
Notes:	Meet Entry conditions for GA2 and HA1.
SAT	UNSAT
Comment(s):	

Check of Initial Notification Form:	
Blocks 1 and 2	are correct, Block 3 should be checked Site Area Emergency.
Critical Step:	Discovers wrong event classification level. Site Area Emergency should be checked.
<b>Instructor Cue:</b>	None
Notes:	None
SAT	UNSAT
Comment(s):	
Step 3	
Check of Initial Notifica	ation Form:
Blocks 4 is acc	urate, Block 5 should have block 5.b checked.
Critical Step:	Discovers that block 5.b should be checked, a release is in progress. Plant Vent monitors are
<b>Instructor Cue:</b>	release point monitors. None
Notes:	None
SAT	UNSAT

## Step 4

Check of Initial Notification Form:

Blocks 6 and 7 are accurate.

**Standard:** No errors in blocks 6 and 7.

**Instructor Cue:** None

Notes: None

SAT \_\_\_ UNSAT \_\_\_

Comment(s):\_\_\_\_

Comment(s):\_\_\_\_

<u>Step 5</u>	
Check of Page Message	:
Scenario ID sho	ould be 3, Site Area Emergency.
<b>Critical Step</b> :	Discovers wrong block checked, should be block 3 or event code 3333.
<b>Instructor Cue:</b>	None
Notes:	None
<b>SAT</b>	UNSAT
Comment(s):	
<b>Terminating Cue:</b> Cl notification time fram	heck of Initial Notification and Pager Message forms complete within 15 minute e.
<b>Evaluation Results:</b>	SAT UNSAT