NINE MILE POINT NUCLEAR STATION 12.25 2.1 8 SRO/STA CANDIDATE OJT PERFORMANCE MANUA 1. Dè na: 9 3. C (A) AND INITIALS **APPROVALS** ISION 3 Supervisor 113/90 Training - Nuclear/ R. T. Seifried Assistant Superintender Nuclear - Training M. J. Colomb Superintendent M. J. Cohmb Sindy Operations Summary of Pages Revision: <u>3</u> (Effective Date:) Number of Pages: 105 <u>Date</u> Pages January 1990 GARA MOHAWK POWER CORPORATION

9305030026 911031 PDR ADDCK 050004

05000410 PDR

13/26



Revision 3 of the SRO/STA Candidate Performance Manual serves to incorporate existing OJT documents into a single SRO/STA Candidate Performance Manual, as well as to make necessary revisions to update these respective documents. These documents existed as separate documents prior to incorporation, each with its own revision number.

Revision 3 of the SRO/STA Candidate Performance Manual incorporates the following document:

SRO/STA Candidate OJT Manual - System 201 Control Rod Drive Rev. 1 + Revisions System 202 Reactor Recirculation System Rev. 1 + Revisions System 205 Residual Heat Removal System Rev. 1 + Revisions System 206 High Pressure Core Spray Rev. 1 + Revisions System 209 Low Pressure Core Spray Rev. 1 + Revisions System 211 Standby Liquid Control System Rev. 1 + Revisions System 212 Reactor Protection System Rev. 1 + Revisions System 214 Rod Position Indication System Rev. 2 + Revisions System 215 Nuclear Instrumentation System Rev. 1 + Revisions System 217 Reactor Core Isolation Cooling System Rev. 1 + Revisions System 218 Automatic Depressurization System Rev. 1 + Revisions System 221 Containment Entry and Exit Rev. 1 + Revisions System 222 Drywell Cooling System Rev. 1 + Revisions System 223 Containment System Rev. 1 + Revisions System 234 Fuel Handling Equipment Rev. 1 + Revisions System 261 Standby Gas Treatment System Rev. 0 + Revisions System 262 AC Electrical Distribution System Rev. 1 + Revisions System 263 DC Electrical Distribution System Rev. 1 + Revisions System 264 Emergency Diesel Generators Rev. 1 + Revisions System 271 Off-Gas System Rev. 1 + Revisions System 286 Fire Protection Systems Rev. 0 + Revisions System 288 Plant Ventilation Systems Rev. 0 + Revisions System 291 Sump and Drain Systems Rev. 2 + Revisions System 296 Remote Shutdown System Rev. 1 + Revisions System 341 Normal Operation Rev. 1 + Revisions System 342 Maintenance & Surveillance Rev. 1 + Revisions System 343 Administrative Rev. 1 + Revisions System 344 Emergency Operation Rev. 1 + Revisions

The revisions to these documents, where they occur, will be marked with a rev bar, and labeled as Revision 3.

UNIT 2 OPS/21

SRO/STA Candidate OJT Manual January 1990

. .

, • •

d -,

•

× . • * • • . .

• •

SRO/STA CANDIDATE OJT MANUAL

٠

.

TABLE OF CONTENTS

1-11	Table of Contents
1–5	Instructions
6	Evaluator Certification Sheet
7	SRO/STA Reactivity Changes Record Sheet
<u>System No.</u>	<u>System Name</u>
201	Control Rod Drive System
202	Reactor Recirculation System
205	Residual Heat Removal System
206	High Pressure Core Spray System
209	Low Pressure Core Spray System
211	Standby Liquid Control System
212	Reactor Protection System
214	Rod Position Indication System
215	Nuclear Instrument System
217	Reactor Core Isolation Cooling System
218	Automatic Depressurization System
. 221	Containment Entry and Exit
222	Drywell Cooling System
223	Containment Systems
234	Fuel Handling Equipment
261	Standby Gas Treatment System
262	AC Electrical Distribution System
263	DC Electrical Distribution System
264	Emergency Diesel Generators
271	Off-Gas System
286	Fire Protection System SRO/STA Candidate OJT Manual -i January 1990
UNIT 2 OPS/2	1

r • n 1 ¥. 1. • . i -.

•

.

۰, . .

٦

A

I • J

SRO/STA CANDIDATE OJT MANUAL

TABLE OF CONTENTS CONT'D

288	Plant Ventilation Systems
291	Sumps and Drains
296	Remote Shutdown Systems
341	Normal Operations
342	Maintenance and Surveillance
343	Administrative
344	Emergency Operations

SRO/STA Candidate OJT Manual -ii January 1990

, . , • r A ۲. ۲. • . N • ۲

• • •

NINE MILE POINT UNIT II . SRO/STA CANDIDATE OJT PERFORMANCE MANUAL

- PURPOSE: The purpose of the SRO/STA Candidate OJT Performance Manual is to provide a systematic method for SRO/STA Candidates to demonstrate proficiency in the performance of job tasks which have been identified in their working environment.
- SCOPE: The SRO/STA Candidate OJT Performance Manual identifies tasks for which SRO/STA Candidates must demonstrate satisfactory performance prior to being considered qualified to perform that task without supervisory aid. The satisfactory performance of each identified task will be witnessed and documented in each SRO/STA Candidate's OJT Manual by a qualified evaluator. Qualified evaluators shall be identified by the Operations Superintendent or his designee.

DESCRIPTION:

- A. Each SRO/STA Operator Candidate will be provided with an OJT Performance Manual. The proper use of this manual is described herein. Each system for which tasks are written is given a three-digit system identification number. Each task performed within or on this system receives a sequential number; e.g. 200.1, 200.2, 200.3. In this example 200 represents the system number and .1, .2 and .3 represent separate tasks. The STA Candidate shall complete the SRO/STA portion of this manual, and those tasks specific to STA Qualification. The Instant SRO Candidate (candidate without prior RO License at NMP-II) will also be required to complete the entire RO Manual in addition to all other manuals listed.
- B. The Instructor Signature for Knowledge will be obtained from the instructor after you have successfully completed the apppropriate lecture; and have attained an 80% or higher on a written examination on the lecture material.

SRO/STA Candidate OJT Manual -1 January 1990

.

.

1

١.

• ,



- C. The satisfactory performance of each task will be witnessed, dated and signed off by a Qualified Evaluator on the Task Evaluator Sheet. The level of performances, "P" perform, "S" simulate, "D" discuss will be identified by the evaluator by circulating the appropriate letter designator. After the Instructor Signature for Knowledge and all task signatures are obtained, the Unit Training Supervisor or his Designee will date and sign the Task Complete space on the Task Evaluator Sheet. The Training Supervisor will then send the Task Evaluator Sheet and, if the individual has successfully completed Evaluator Training as specified in NTI 4.4.6, the Evaluator Certification Sheet to the Operations Superintendent.
- D. The Operations Superintendent should then date and sign the Task Qualified space on the Task Evaluator Sheet. He may or may not date and sign the Evaluator Certification Sheet. Both forms are then returned to the Operations Training Supervisor.
- E. The Unit II Operations Training Supervisor will then file the original Task Evaluator Sheet in the individual's OJT Manual. This program will be reviewed monthly.
- F. Qualified evaluators shall be identified by the Operations Superintendent or his designee as specified in NTI 4.4.6, Section 5.

RESPONSIBILITY:

The primary responsibility for the completion of this manual is with the individual. The Operations Superintendent and Operations Training Department will provide assistance as required to aid the SRO/STA Candidate in the completion of the manual.

SRO/STA Candidate OJT Manual -2 January 1990

UNIT 2 OPS/21

3

3

` v ۰. ۰. ۲ . .

.

×

, ,

• -

Task Qualification Format

- The following sections are contained in each task qualification module:
 - a. Cover sheet
 - Identifies task module
 - Approvals and revision number
 - b. References
 - Provides a comprehensive list of procedures and other references as needed in order to satisfactorily perform identified job tasks for that qualification module.
 - c. Objectives and Standards for Task Performance
 - Each task has a task code number for tracking the progress of SRO/STA Candidates.
 - Task performance criteria and objectives are listed.
 - d. Task Summary Sheet
 - Each task requires an evaluator's signature to document satisfactory performance of that task and the level of performance circled.

3

- This sheet serves as a record of satisfactory completion of the tasks listed in a module.
- A copy of the Task Summary Sheet is kept with training records.
- The Task Summary Sheet is periodically reviewed to update status of qualification.

SRO/STA Candidate OJT Manual -3 January 1990

, , , _ â .

•

¢

;

.

.

. .

Instructions to SRO/STA Candidates

- The manual has Knowledge Requirements and Practical Requirements that must <u>all</u> be completed <u>prior</u> to the task completed signature being obtained.
- 2. The Knowledge Requirement, where required, is satisfied by the operator attending the scheduled lecture that satisfies the knowledge requirements of each subject area and satisfactorily completing a written exam on that subject. The exam will be given at a time designated by the Operations Training Supervisor. Satisfactory results are shown by obtaining 80% or greater on the exam. At this time, the Training Supervisor or his designee will sign and date the knowledge complete blank on the Task Summary Sheet.

3. PRACTICAL REQUIREMENT

This requirement has an action code associated with each of Α. the items listed. These action codes (P, S or D) designate the level of performance required for satisfactory completion of that item. A "P" designates actual performance which must be accomplished by the operator and witnessed by a qualified evaluator prior to obtaining the evaluator signature. An "S" actual done in lieu of designates simulation may be performance and witnessed by the qualified evaluator prior to Α "D" designates evaluator signature. the obtaining discussion of the task with a qualified evaluator prior to obtaining the evaluator signature. Action code "P/S" will be If driven by common sense and present plant conditions. present plant conditions prohibit system operation to perform the task, then simulation is an acceptable criteria for task completion. Tasks followed by a + sign indicate that in-plant performance is required for that specific task.

SRO/STA Candidate OJT Manual _4 January 1990

+

1

` · · · ,

, * r Line and the second s ×

,

•

e }

- B. The designator (P) "perform" shall be understood to pertain to only those actions actually performed by the student in the routine performance of the task.
- C. The designator (S) "simulate" shall be understood as an in-plant walk-through of the steps necessary to perform a task. Switch locations, system indication locations, expected system responses and system operational constraints shall be discussed in a chronological order during the course of the simulation.
- The designator (D) "discussion" shall be understood to pertain D. to those tasks which are not readily performed or simulated. The action code "discussion" shall be done with a qualified In evaluating the trainee for a task. the evaluator. evaluator should include a discussion of, but not limited to, personnel safety (including ALARA), proper use of procedures when operating equipment, correct application of appropriate (SP, SEPP, RPP. RAP, or others Site Procedures as appropriate), proper use of Technical Specifications and the proper use and routing of reports or documentation as required by procedures related to the task.
- E. The candidate should review appropriate referenced procedures and material for identified job tasks prior to performing those tasks for the OJT evaluator.
- F. The candidate should review the performance criteria and performance objective for each qualification task. Be prepared to answer questions based on the performance criteria for that task. The performance objective for that task shall be considered met if all actions performed are in accordance with referenced procedures.

SRO/STA'Candidate OJT Manual -5 January 1990

μ ,

τ.,

. · · · ·

· · · -*

•

. .

1) н на селото на селот На селото на , , -

***** r -٤

1

- G. For all tasks governed by a procedure or procedures, compliance to these procedures shall be required by the evaluator in order to consider you qualified to perform that task.
- H. Notify a qualified evaluator of the job tasks you desire to perform for evaluation so that the evaluator can prepare and make necessary arrangements to evaluate you in a timely manner.
- I. Task Qualification Modules are to be retained in your OJT Manual. When not in use the Manual shall be kept such that the Operations Training Supervisor or Operations Superintendent may have access to it as necessary.
- J. Task Complete signature blocks will be signed when <u>all</u> other items on the Task Summary Sheet are signed off. Upon obtaining the Task Complete signature the Task Evaluator Sheet will be turned in to the Training Department program coordinator to be entered in the individual's personal training record.
- K. The candidate must perform at least five (5) significant control manipulations <u>in the plant</u> that effect reactivity or power level. Manipulations of the controls of the plant must be documented in the SRO/STA Reactivity Changes Record Sheet. Manipulations of the controls simulated in the plant simulator may also be recorded in the SRO/STA Reactivity Changes Record Sheet.
- EVALUATORS: Task evaluators on Nine Mile Point Unit II must hold an RO or SRO license and have completed the TSD, OJT evaluators course. Qualified simulator instructors may also sign-off tasks when performed in the simulator.

SRO/STA Candidate OJT Manual -6 January 1990

UNIT 2 OPS/21

Ë

3

1

· · ·

. .

.

٩

и

Instructions to Evaluator

- 1. Review appropriate referenced procedures and material for the applicable qualification tasks prior to evaluating the operator.
- 2. Review the performance criteria and practical requirements for each qualification task. Questions based on the performance criteria for each qualification task should be used to measure the operator's knowledge level for performing that task; written quizzes may be used for this purpose. The performance objective shall be considered met if all actions by the operator are performed for that task in accordance with referenced procedures.
- 3. For all tasks governed by a procedure or procedures, compliance to said procedures shall be required by the evaluator in order to consider an operator qualified to perform that task.
- 4. If any of the task performance criteria and/or performance objectives are not satisfactorily met, indicate the problem area to the operator. Do not sign the task evaluator block for that task in the Task Qualification module Checkoff Sheet.
- 5. The evaluator will indicate satisfactory performance for each task in the following manner:
 - a. Ensure the student's name is written at the top of the Task Summary Sheet.
 - b. Legibly sign the task on the "Evaluator" line in black ink.
 - c. Circle the applicable "Action Code" to denote the level of performance.
 - d. Include the date the evaluation was performed.

SRO/STA Candidate OJT Manual -7 January 1990

. · • •

.

•

• • • • • • •

. s.

Name

The above-named individual has successfully completed evaluator training.

Unit II Operations Training Supervisor or Designee

<u>م</u>

I designate the above-named person as a certified evaluator for the following systems by initialing and dating the blanks.

	Operations Superintend	ent	
<u>System No.</u>	<u>System Name</u>	<u>Initials</u>	<u>Date</u>
201	Control Rod Drive System	<u> </u>	
202	Reactor Recirculation System		
205	Residual Heat Removal System		
206	High Pressure Core Spray System		
209 `	Low Pressure Core Spray System		
, 211	Standby Liquid Control System		
212	Reactor Protection System		
214	Rod Position Indication System		
215	Nuclear Instrument System		
217	Reactor Core Isolation Cooling System		
218	Automatic Depressurization System		
221	Containment Entry and Exit		
222	Drywell Cooling System		
223	Containment Systems	. <u></u>	ł
234	Fuel Handling Equipment		
261	Standby Gas Treatment System	•	
262	AC Electrical Distribution System		
263	DC Electrical Distribution System	·	
	SRO/STA Candidate OJT Manual -8 January	1990	

•

. `

• ----

1 ×

• *

EVALUATOR CERTIFICATION SHEET (CONT'D)

Sys	tem No.	<u>System Name</u>	<u>Initials</u>	<u>Date</u>
	264	Emergency Diesel Generators	<u> </u>	
,	271	Off-Gas System		
	286	Fire Protection System		··
	288	Plant Ventilation Systems	• 	
	291	Sumps and Drains		
	296	Remote Shutdown Systems		
	341	Normal Operations		
,	342	Maintenance and Surveillance		
	343	Administrative		
	344	Emergency Operations		··

UNIT 2 OPS/21

SRO/STA Candidate OJT Manual -9 January 1990

.

1 1

FILE CODE:			ODE:
EVOLUTION PERFORMED	INITIAL POWER LEVEL	FINAL POWER LEVEL	PLANT/ SIMULATOR
	×		
<u></u>			
,			
·····			
		· · · ·	
<u> </u>			
······································			
	,		
			·
		EVOLUTION PERFORMED INITIAL POWER LEVEL Image: I	FILE C INITIAL POWER LEVEL POWER LEVEL P

SRO/STA Candidate OJT Manual -10 January 1990

.



.

, ◄

.

•

•

.

.

• •

NINE MILE POINT UNIT II

SRO/STA CANDIDATE

OJT MANUAL

I. SYSTEM 201 CONTROL ROD DRIVE

II. SYSTEM REFERENCES

- A. NMPII FSK, LSK, ESK Drawings
- B. NMPII Operating Procedure N2-OP-30, 95A, 95B, 96, 101A
- C. NMPII Technical Specifications
- D. NMPII Licensed Operator Text CRD, CRDH, RMC, RPS

III. TASK OBJECTIVES

At the completion of this task, the student will be able to perform all evolutions associated with the system listed under Practical Requirements.

IV. TASK PERFORMANCE CRITERIA

A. Knowledge Requirements

The student will have demonstrated satisfactory knowledge of the Control Rod Drive System by attending the Operator Training lecture and satisfactorily completing a written examination on the following:

- 1. OLT-6
- 2. OLT-7
- 3. OLT-31
- 4. OLT-35
- B. Standards for Acceptable Task Performance

Each practical requirement will be considered satisfied if all actions taken by the candidates are in accordance with approved NMPC procedures.

SRO/STA OJT Manual -11 January 1990

UNIT 2 OPS/21

: 3

. 3 . . 1

:

.

C. Practical Requirements

ı

	ITEM	ACTION CODE
201.1	Read and discuss Technical Specifications requirements associated with reactivity controls	D
201.2	Verify Control Rods operable per Technical Specifications	P/S

UNIT 2 OPS/21

.

SRO/STA OJT Manual -12 January 1990

•

•

Student's Name				
CONTROL ROD DRIVE				
D	Date			
P/S	۰ ۱			
	Date			
Instructor Signature	Date			
Instructor Signature	Date			
· ·				
Instructor Signature	Date			
	Date			
	De 1			
Instructor Signature	Date			
Task Complete:				
Training Supervisor	Date ·			
Department Supervisor	Date			
	CONTROL ROD DRIVE D D P/S Instructor Signature Department Supervisor			

SRO/STA OJT Manual -13 January 1990

.

.

. r

. •

NINE MILE POINT UNIT II

SRO/STA CANDIDATE

OJT MANUAL

I. SYSTEM 202 REACTOR RECIRCULATION SYSTEM

II. SYSTEM REFERENCES

- A. NMPII FSK, LSK, ESK Drawings
- B. NMPII Operating Procedures, N2-OP-29 101A, B,C
- C. NMPII Licensed Operator Text, RRS, RRFC
- D. NMPII Technical Specifications
- E. NMPII Surveillance Procedures

III. TASK OBJECTIVES

At the completion of this task, the student will be able to perform all evolutions associated with the system listed under Practical Requirements.

IV. TASK PERFORMANCE CRITERIA

A. Knowledge Requirements

The student will have demonstrated satisfactory knowledge of the Reactor Recirculation System by attending the Operator Training lecture and satisfactorily completing a written examination on the following:

- 1. OLT-8
- 2. OLT-9
- B. Standards for Acceptable Task Performance

Each practical requirement will be considered satisfied if all actions taken by the candidates are in accordance with approved NMPC procedures.

UNIT 2 OPS/21

3.

ų

p.

, ,

•

, .

e
C. Practical Requirements

202.1Determine Thermal Shock Temperature differential and flow rate prior to startup of idle recirc loopP/S202.2Perform Reactor Vessel Head Flange and Shell Flange temperature verification (N2-OSP-RCS-@002)P/S202.3Determine if Flow Mismatch exceeds Technical Specification requirementsP/S202.4Determine Jet Pump OperabilityP/S202.5Determine Power to Flow to be within Technical Specification limitsP/S202.6Determine applicable limitations for single-loop operationP/S202.7Verify Reactor Coolant leakage detection systems operable per Technical SpecificationsP/S		ITEM	ACTION <u>CODE</u>
202.2Perform Reactor Vessel Head Flange and Shell Flange temperature verification (N2-OSP-RCS-@002)P/S202.3Determine if Flow Mismatch exceeds Technical Specification requirementsP/S202.4Determine Jet Pump OperabilityP/S202.5Determine Power to Flow to be within Technical Specification limitsP/S202.6Determine applicable limitations for 	202.1	Determine Thermal Shock Temperature differential and flow rate prior to startup of idle recirc loop	P/S
202.3Determine if Flow Mismatch exceeds Technical Specification requirementsP/S202.4Determine Jet Pump OperabilityP/S202.5Determine Power to Flow to be within Technical Specification limitsP/S202.6Determine applicable limitations for single-loop operationP/S202.7Verify Reactor Coolant leakage detection systems operable per Technical SpecificationsP/S	202.2	Perform Reactor Vessel Head Flange and Shell Flange temperature verification (N2-OSP-RCS-@002)	P/S
202.4Determine Jet Pump OperabilityP/S202.5Determine Power to Flow to be within Technical Specification limitsP/S202.6Determine applicable limitations for single-loop operationP/S202.7Verify Reactor Coolant leakage detection systems operable per Technical SpecificationsP/S	202.3	Determine if Flow Mismatch exceeds Technical Specification requirements	P/S
202.5Determine Power to Flow to be within Technical Specification limitsP/S202.6Determine applicable limitations for single-loop operationP/S202.7Verify Reactor Coolant leakage detection systems operable per Technical SpecificationsP/S	202.4	Determine Jet Pump Operability	P/S
 202.6 Determine applicable limitations for P/S single-loop operation 202.7 Verify Reactor Coolant leakage detection systems · P/S operable per Technical Specifications 	202.5	Determine Power to Flow to be within Technical Specification limits	P/S
202.7 Verify Reactor Coolant leakage detection systems · P/S operable per Technical Specifications	202.6	Determine applicable limitations for single-loop operation	P/S
	202.7	Verify Reactor Coolant leakage detection systems operable per Technical Specifications	P/S

SRO/STA OJT Manual -15 January 1990

UNIT 2 OPS/21

tı 4 • .

· •

x

,

• ,

.

Student's Name

	SYSTEM 202 RE	ACTOR RECIRCULATION SYSTEM	
202.1		P/S	Della
202.2	Evaluator	P/S	Date
202.3	Evaluator	P/S	Date
202 4	Evaluator	D/S	Date
202.4	Evaluator	F73	Date
202.5	Evaluator	P/S	Date
202.6	Fyaluator	P/S	Date
202.7	Evaluator	P/S	
	Evaluator		Dale
Knowledg OLT-8	e Complete:In	structor Signature	Date
Knowledg OLT-9	e Complete:In	structor Signature .	Date
Task Con	nplete:Tra	aining Supervisor	Date
Task Qua	lified: De _l	partment Supervisor	Date

.

SRO/STA OJT Manual -16 January 1990

.

UNIT 2 OPS/21

.

*

• •

. · ·

. s

ħ

NINE MILE POINT UNIT II

SRO/STA CANDIDATE

OJT MANUAL

I. SYSTEM 205 RESIDUAL HEAT REMOVAL SYSTEM

II. SYSTEM REFERENCES

- A. NMPII FSK, LSK, ESK Drawings
- B. NMPII Operating Procedures N2-OP-37
- C. NMPII Licensed Operator Text RHR
- D. NMPII Surveillance Test Procedures
- E. NMPII Technical Specifications

III.TASK OBJECTIVES

At the completion of this task, the student will be able to perform all evolutions associated with the system listed under Practical Requirements.

IV. TASK PERFORMANCE CRITERIA

A. Knowledge Requirements

The student will have demonstrated satisfactory knowledge of the Residual Heat Removal System by attending the Operator Training lecture and satisfactorily completing a written examination on the following:

ì

1. OLT-15

B. Standards for Acceptable Task Performance

Each practical requirement will be considered satisfied if all actions taken by the candidates are in accordance with approved NMPC procedures.

SRO/STA OJT Manual -17 January 1990

UNIT 2 OPS/21

· · ·

.

.

C. Practical Requirements

ITEMACTION
CODE205.1Monitor the RHR System for LPCI operability
requirements per NMP Technical SpecificationsP205.2Discuss operability requirements for shutdown
cooling mode of RHR SystemD

SRO/STA OJT Manual -18 January 1990

11

.

UNIT 2 OPS/21

l

UNIT 2 UP5/21

.

,

٠

• • •

Student's	Name	r	
<u>SYS</u>	TEM 205 RESI	DUAL HEAT REMOVAL SYSTEM	
205.1	·	Ρ	
205.2	Evaluator	 D	Date
205.2	Evaluator	0	Date
Knowledge Co OLT-15	mplete: Inst	ructor Signature	Date
Task Complet	e: -		
- 6	Trai	ning Supervisor	Date
Task Complet	e:	1	
-	Depa	rtment Supervisor	Date

SRO/STA OJT Manual -19 January 1990

UNIT 2 OPS/21

, , .

, _

к У ¥ '

v

F

a

NINE MILE POINT UNIT II

SRO/STA CANDIDATE

OJT MANUAL

I. SYSTEM 206 HIGH PRESSURE CORE SPRAY SYSTEM

II. SYSTEM REFERENCES

- A. NMPII FSK, LSK, ESK Drawings
- B. NMPII Operating Procedures N2-OP-33
- C. NMPII Surveillance Test Procedures
- D. NMPII Licensed Operator Text CSH
- E. NMPII Technical Specifications

III. TASK OBJECTIVES

At the completion of this task, the student will be able to perform all evolutions associated with the system listed under Practical Requirements.

IV. TASK PERFORMANCE CRITERIA

A. Knowledge Requirements

The student will have demonstrated satisfactory knowledge of the High Pressure Coolant Injection System by attending the Operator Training lecture and satisfactorily completing a written examination on the following:

1. OLT-12

B. Standards for Acceptable Task Performance

•Each practical requirement will be considered satisfied if all actions taken by the candidates are in accordance with approved NMPC procedures.

3

UNIT 2 OPS/21

SRO/STA OJT Manual -20 January 1990

1 · · .

u

в

A a

· ·

C. Practical Requirements

<u>ITEM</u>

206.1 Discuss the HPCS System Technical Specifications operability requirements

ACTION

UNIT 2 OPS/21

SRO/STA OJT Manual -21 January 1990

.

• ·

· · ·

•

. ,

.

.

.

1

•

	<u>SYSTEM 206</u>	HIGH PRESSURE CORE SPRAY SYSTEM	
206.1	મં	Ρ	
	Evaluator	•	Date
	ι,		
		· · · · · · · · · · · · · · · · · · ·	
	•		
Knowledg	ge Complete:		1
OLT-12	- · · <u></u>	Instructor Signature	Date
, Ta ala Qaa			
TASK CON	npiete:	Training Supervisor	Date
		4	
Task Con	nplete:		
		Department Supervisor	Date
		•	

UNIT 2 OPS/21

1

.

SRO/STA OJT Manual -22 January 1990

· ·

• , **(**

• • •

• •

NINE MILE POINT UNIT II

SRO/STA CANDIDATE

OJT MANUAL

I. SYSTEM 209 LOW PRESSURE CORE SPRAY SYSTEM

II. SYSTEM REFERENCES

- A. NMPII FSK, LSK, ESK Drawings
- B. NMPII Operating Procedures N2-OP-32
- C. NMPII Surveillance Test Procedures
- D. NMPII Licensed Operator Text
- E.__ NMPII Technical Specifications

III.TASK OBJECTIVES

At the completion of this task, the student will be able to perform all , evolutions associated with the system listed under Practical Requirements.

IV. TASK PERFORMANCE CRITERIA

A. Knowledge Requirements

The student will have demonstrated satisfactory knowledge of the Low Pressure Core Spray System by attending the Operator Training lecture and satisfactorily completing a written examination on the following:

1. OLT-14

B. Standards for Acceptable Task Performance

Each practical requirement will be considered satisfied if all actions taken by the candidates are in accordance with approved NMPC procedures.

UNIT 2 OPS/21

SRO/STA OJT Manual -23 January 1990

ı. . . . •

.

C. Practical Requirements

ITEM

209.1 Discuss the LPCS System Technical Specification operability requirements

Ρ

SRO/STA OJT Manual -24 January 1990

UNIT 2 OPS/21

• • • •

.

i A

, ,

. V

, L

•

•

•

1

1

. N

SYSTEM	209 LOW PRESSUE	RE CORE SPRAY SYST	EM
209.1		Р	
Ev	aluator		Date
			ø
		o.	
Knowledge Comple	te:		
OL1-14	Instructor	Signature	Date
Task Complete:		·····	
	Training Su	iperv i sor	Date
		,	
Task Qualified:_			
	Department	Supervisor	Date
1			

.

*

SRO/STA OJT Manual -25 January 1990 UNIT 2 OPS/21 .

٩

.

t.

,

,

.

•

٠

•

2

,

• •

.

NINE MILE POINT UNIT II

SRO/STA CANDIDATE

OJT MANUAL

I. SYSTEM 211 STANDBY LIQUID CONTROL SYSTEM

II. SYSTEM REFERENCES

- A. NMPII FSK, LSK, ESK Drawings
- B. NMPII Operating Procedures N2-OP-36
- C. NMPII Surveillance Test Procedures
- D. NMPII Licensed Operator Text SLC
- E. NMPII Technical Specifications

III.TASK OBJECTIVES

At the completion of this task, the student will be able to perform all evolutions associated with the system listed under Practical Requirements.

IV. TASK PERFORMANCE CRITERIA

A. Knowledge Requirements

The student will have demonstrated satisfactory knowledge of the Standby Liquid Control System by attending the Operator Training lecture and satisfactorily completing a written examination on the following:

1. OLT-34

B. Standards for Acceptable Task Performance

Each practical requirement will be considered satisfied if all actions taken by the candidates are in accordance with approved NMPC procedures.

SRO/STA OJT Manual -26 January 1990

UNIT 2 OPS/21

. :

• •

. .

C. Practical Requirements

<u>ITEM</u>

211.1 Monitor the SLCS for Technical Specification operability requirements

ACTION CODE

Ρ

Ρ

211.2 Determine Sodium Pentaborate requirements to provide adequate Shutdown Margin IAW Technical Specifications

SRO/STA OJT Manual -27 January 1990

UNIT 2 OPS/21

, , , * . .

۰ ۲

• •

Student's Name					
	SYSTEM 211	STANDBY LIQUID CONT	ROL SYSTEM		
211.1	Evaluator		Р <u>,</u> —	Date	
	Evaluator			Date	
Knowledg OLT-34	e Complete:	Instructor Signature		Date	
Task Com	plete:	Training Supervisor	·	Date	
Task Qua	lified:	Department Superviso		Date	

SRO/STA OJT Manual -28 January 1990

.

UNIT 2 OPS/21

NINE MILE POINT UNIT II .

SRO/STA CANDIDATE

OJT MANUAL

I. SYSTEM 212 REACTOR PROTECTION SYSTEM

II. SYSTEM REFERENCES

- A. NMPII FSK, LSK, ESK Drawings
- B. NMPII Operating Procedures N2-OP-97
- C. NMPII Surveillance Test Procedures
- D. NMPII Licensed Operator Text RPS
- E. NMPII Technical Specifications

III.TASK OBJECTIVES

At the completion of this task, the student will be able to perform all evolutions associated with the system listed under Practical Requirements.

IV. TASK PERFORMANCE CRITERIA

A. Knowledge Requirements

The student will have demonstrated satisfactory knowledge of the Reactor Protection System by attending the Operator Training lecture and satisfactorily completing a written examination on the following:

1. OLT-35

B. Standards for Acceptable Task Performance

Each practical requirement will be considered satisfied if all actions taken by the candidates are in accordance with approved NMPC procedures.

UNIT 2 OPS/21

SRO/STA OJT Manual -29 January 1990

. .

• •

ě

i.

i.

•

٨ ,

.

i i .

v

C. Practical Requirements

<u>ITEM</u>

Monitor the RPS System for Technical Specification operability requirements 212.1

Ρ

UNIT 2 OPS/21

SRO/STA OJT Manual

-30 January 1990

. 0 · · · · • , · ·

. 0 .

,

. ,

•

•

н

Student's Name		
<u>SYSTEM 212</u>	REACTOR PROTECTION SYSTEM	
Evalua	tor	Date
Knowledge Complete:_ OLT-35	Instructor Signature	Date
Task Complete:	Training Supervisor	Date
Task Qualified:	Department Supervisor	Date

SRO/STA OJT Manual -31 January 1990

UNIT 2 OPS/21

. . -

х Г Г

1 . .

• • • · · · · • •

• .

•

NINE MILE POINT UNIT II

SRO/STA CANDIDATE

OJT MANUAL

I. SYSTEM 214 RPIS

II. SYSTEM REFERENCES

- A. NMPII FSK, LSK, ESK Drawings
- B. NMPII Operating Procedures N2-OP-97
- C. NMPII Surveillance Test Procedures
- D. NMPII Licensed Operator Text RMC
- E. NMPII Technical Specifications

III.TASK OBJECTIVES

At the completion of this task, the student will be able to perform all evolutions associated with the system listed under Practical Requirements.

IV. TASK PERFORMANCE CRITERIA

A. Knowledge Requirements

The student will have demonstrated satisfactory knowledge of the Rod Position Indication System by attending the Operator Training lecture and satisfactorily completing a written examination on the following:

1. OLT-31

B. Standards for Acceptable Task Performance

Each practical requirement will be considered satisfied if all actions taken by the candidates are in accordance with approved NMPC procedures.

SRO/STA OJT Manual -32 January 1990

UNIT 2 OPS/21

P

•

•

.

ч. .

.

• .

.

, A Ŀ
C. Practical Requirements

ITEM

214.1 Discuss all Technical Specification requirements associated with operability of RPIS

Ρ

ACTION CODE

UNIT 2 OPS/21

SRO/STA OJT Manual -33 January 1990

Ì



м

· ·

· · ·

Student's Name	<u></u>	
SYSTEM 214	ROD POSITION INDICATION SYSTEM	
214.1Evaluator	P	Date
Knowledge Complete: OLT-31	Instructor Signature	Date
Task Complete:	Training Supervisor	Date
Task Qualified:	Department Supervisor	Date

SRO/STA OJT Manual -34 January 1990

UNIT 2 OPS/21

• • • •

ч 4

a **N**

• • • • •

.

.

i -

NINE MILE POINT UNIT II

SRO/STA CANDIDATE

OJT MANUAL

I. SYSTEM 215 NUCLEAR INSTRUMENTATION SYSTEM

II. SYSTEM REFERENCES

- A. NMPII FSK, LSK, ESK Drawings
- B. NMPII Operating Procedures N2-OP-92
- C. NMPII Licensed Operator Text SRM, IRM, LPRM, APRM, TIP, RBM
- D. NMPII Technical Specifications

III.TASK OBJECTIVES

At the completion of this task, the student will be able to perform all evolutions associated with the system listed under Practical Requirements.

IV. TASK PERFORMANCE CRITERIA

A. Knowledge Requirements

The student will have demonstrated satisfactory knowledge of the Nuclear Instrumentation System by attending the Operator Training lecture and satisfactorily completing a written examination on the following:

- 1. OLT-26
- 2. OLT-27 3. OLT-28
- 3. OLT-28 4. OLT-29
- 4. OLT-29 5. OLT-30
- 6. OLT-32
- B. Standards for Acceptable Task Performance

Each practical requirement will be considered satisfied if all actions taken by the candidates are in accordance with approved NMPC procedures.

SRO/STA OJT Manual -35 January 1990

UNIT 2 OPS/21

ı.

. .

r •

C. Practical Requirements

	ITEM	<u>CODE</u>
215.1	Monitor the Neutron Monitoring System for Technical Specification operability requirements	Р
215.2	Evaluate the plant performance indicator (Pl edit) for Technical Specification compliance	Р

.*

* ~ …

UNIT 2 OPS/21

.

SRO/STA OJT Manual -36 January 1990

1

· · · ·

* •

-

· .

,

-

Student's Name

SYSTEM 215	NUCLEAR INSTRUMENTATION SYSTEM	
215.1	Р ,	
Evaluator		Date
215.2	Р	2
Evaluator		Date
Knowledge Complete:	Instructor Signature	Date
021-20		Date
	1	
Knowledge Complete:	Tashurahan Cisaahuna	
UL1-27	instructor signature	Date
Knowledge Complete:		
OL1-28	Instructor Signature	Date
Knowledge Complete:		
OLT-29	Instructor Signature	Date
Knowledge Complete:		
OLT-30	Instructor Signature	Date
Task Complete:		
1	Training Supervisor	Date
Task Qualified:		
-	Department Supervisor	Date
ŕ		

ş

SRO/STA OJT Manual -37 January 1990

UNIT 2 OPS/21

.

.

6

٠

1.4

я *

ŕ

s

•

•

e

•

4

1 , j

•

1 • 1

NINE MILE POINT UNIT II

SRO/STA CANDIDATE

OJT MANUAL

I. SYSTEM 217 REACTOR CORE ISOLATION COOLING SYSTEM (RCIC)

II. SYSTEM REFERENCES

- A. NMPII FSK, LSK, ESK Drawings
- B. NMPII Operating Procedures N2-OP-35
- C. NMPII Licensed Operator Text ICS
- D. NMPII Surveillance Test Procedures
- E. NMPII Technical Specifications

III.TASK OBJECTIVES

At the completion of this task, the student will be able to perform all evolutions associated with the system listed under Practical Requirements.

IV. TASK PERFORMANCE CRITERIA

A. Knowledge Requirements

The student will have demonstrated satisfactory knowledge of the Reactor Core Isolation Cooling System by attending the Operator Training lecture and satisfactorily completing a written examination on the following:

1. OLT-16

B. Standards for Acceptable Task Performance

Each practical requirement will be considered satisfied if all actions taken by the candidates are in accordance with approved NMPC procedures.

3

SRO/STA OJT Manual -38 January 1990

1 и и т -, , * я .

C. Practical Requirements

<u>ITEM</u>

217.1

.1 Monitor RCIC for Technical Specification operability requirements

ACTION CODE

Ρ

UNIT 2 OPS/21

SRO/STA OJT Manual -39 January 1990

, •

•

•. •. •. /

۰ _ _

Stude	ent's Name		
	SYSTEM 217	REACTOR CORE ISOLATION COOLING	SYSTEM
217.1	·	Р	
	Evaluato)r	Date
		I.	
Knowledg	ge Complete:	· · · · · · · · · · · · · · · · · · ·	
ULI-16		Instructor Signature	Date
To also Car			
TASK CON	npiete:	Training Supervisor	Date
		*	
Task Qua	alified:	·	
		Department Supervisor	Date

UNIT 2 OPS/21

١,

SRO/STA OJT Manual -40 January 1990

· · ·

NINE MILE POINT UNIT II

SRO/STA CANDIDATE

OJT MANUAL

I. SYSTEM 218 AUTOMATIC DEPRESSURIZATION SYSTEM

II. SYSTEM REFERENCES

- A. NMPII FSK, LSK, ESK Drawings
- B. NMPII Operating Procedures N2-OP-34
- C. NMPII Licensed Operator Text ADS
- D. NMPII Technical Specifications

III.TASK OBJECTIVES

At the completion of this task, the student will be able to perform all evolutions associated with the system listed under Practical Requirements.

IV. TASK PERFORMANCE CRITERIA

A. Knowledge Requirements

The student will have demonstrated satisfactory knowledge of the Automatic Depressurization System by attending the Operator Training lecture and satisfactorily completing a written examination on the following:

1. OLT-13

B. Standards for Acceptable Task Performance

Each practical requirement will be considered satisfied if all actions taken by the candidates are in accordance with approved NMPC procedures.

SRO/STA OJT Manual -41 January 1990

,

P •

· · · · ,

i i •1 **•**

1

4

. • F

-

۴

C. Practical Requirements

-	ITEM	ACTION CODE
218.1	Discuss Technical Specification operability requirements for ADS	D
218.2	Direct the operator actions associated with ADS	Р

SRO/STA OJT Manual -42 January 1990

,

UNIT 2 OPS/21

* a`

,

•

Stude	nt's Name			
	SYSTEM 218	AUTOMATIC DEPRESSURIZ	ATION SYSTEM	
218.1		`D		Date
218.2		Ρ		
	Evaluator	<u> </u>		Date
	ge Complete:	Instructor Signature		Na to
021-13				Date
Task Com	nplete:			
	• • • • • • • • • • • • • • • • • • • •	Training Supervisor		Date
		×		1
Task Qua	lified:	'Department Supervisor		Date

SRO/STA OJT Manual -43 January 1990

UNIT 2 OPS/21

• . · · · . . , . 1 y -. . e .

·

ъ

NINE MILE POINT UNIT II

SRO/STA CANDIDATE

OJT MANUAL

I. <u>SYSTEM 221</u> <u>CONTAINMENT ENTRY AND EXIT</u>

II. SYSTEM REFERENCES

- A. NMPII FSK, LSK, ESK Drawings
- B. NMPII Operating Procedures RP-9
- C. NMPII Licensed Operator Text Containment Entry and Exit
- D. NMPII Technical Specifications

III.TASK OBJECTIVES

At the completion of this task, the student will be able to perform all evolutions associated with the system listed under Practical Requirements.

IV. TASK PERFORMANCE CRITERIA

A. Knowledge Requirements

The student will have demonstrated satisfactory knowledge of the Containment Entry and Exit System by attending the Operator Training lecture and satisfactorily completing a written examination on the following:

1. OLT-91

B. Standards for Acceptable Task Performance

Each practical requirement will be considered satisfied if all actions taken by the candidates are in accordance with approved NMPC procedures.

SRO/STA OJT Manual -44 January 1990

. • ÷ س γ. μ · , x

ι. •

, .

,

4 7

-

u.

C. Pra	ctical Requirements	ΔΟΤΙΟΝ
	ITEM	CODE
221.1	Discuss Containment Entry and Exit procedures	D+
221.2	Review Drywell Close out requirements	P/S+

+Indicates tasks required to be performed/simulated in the Plant.

SRO/STA OJT Manual

1

-45 January 1990

UNIT 2 OPS/21

Г. Б · · ·

в. ,

.

•

* . •

1

p

* * * * * * * .

* I.

, •

۹, • ,

Student's Nam	ne	
SYSTEM	221 CONTAINMENT ENTRY AND EXIT	
221.1	D+	Date
221.2	P/S+	Date
Knowledge Comple OLT-91	te: Instructor Signature	Date
Task Complete:	Training Supervisor	Date
Task Qualified:_	Department Supervisor	Date

SRO/STA OJT Manual -46 January 1990

.

ъ . . • • • •

1 bi

.

,

. ٩

•

٠ 46

NINE MILE POINT UNIT II

SRO/STA CANDIDATE

OJT MANUAL

I. SYSTEM 222 DRYWELL COOLING SYSTEM

II. SYSTEM REFERENCES

- A. NMPII FSK. LSK, ESK Drawings
- B. NMPII Operating Procedures N2-OP-60
- C. NMPII Licensed Operator Text DRS
- D. NMPII Technical Specifications

III.TASK OBJECTIVES

At the completion of this task, the student will be able to perform all evolutions associated with the system listed under Practical Requirements.

IV. TASK PERFORMANCE CRITERIA

A. Knowledge Requirements

The student will have demonstrated satisfactory knowledge of the Drywell Cooling System by attending the Operator Training lecture and satisfactorily completing a written examination on the following:

1. OLT-20

B. Standards for Acceptable Task Performance

Each practical requirement will be considered satisfied if all actions taken by the candidates are in accordance with approved NMPC procedures.

SRO/STA OJT Manual -47 January 1990

UNIT 2 OPS/21

: 3

, * . **`**

n .

.

4

,

.

,

C. Practical Requirements

ITEM

222.1 Monitor the DRS System for compliance with Technical Specifications

÷

ACTION

CODE

Ρ



UNIT 2 OPS/21

х . . • a

•

• 、

· ·

•

SYSTEM 222 222.1 Evaluator	DRYWELL COOLING SYSTEM	Date
Knowledge Complete: OLT-20	Instructor Signature	Date
Task Complete:	Training Supervisor	Date
Task Qualified:	Department Supervisor	Date

SRO/STA OJT Manual -49 January 1990

Student's Name

4

I

4

, *#*

μ

•

•

;

NINE MILE POINT UNIT II .

SRO/STA CANDIDATE

OJT MANUAL

I. SYSTEM 223 CONTAINMENT SYSTEMS

II. SYSTEM REFERENCES

- A. NMPII FSK. LSK, ESK Drawings
- B. NMPII Operating Procedures N2-OP-61A, 62,81, 82, 83, 85
- C. NMPII Licensed Operator Text PSC, ACC
- D. NMPII Surveillance Test Procedures
- E. NMPII Technical Specifications

III.TASK OBJECTIVES

At the completion of this task, the student will be able to perform all evolutions associated with the system listed under Practical Requirements.

IV. TASK PERFORMANCE CRITERIA

A. Knowledge Requirements

The student will have demonstrated satisfactory knowledge of the Containment System by attending the Operator Training lecture and satisfactorily completing a written examination on the following:

1. OLT-19 2. OLT-23

B. Standards for Acceptable Task Performance

Each practical requirement will be considered satisfied if all actions taken by the candidates are in accordance with approved NMPC procedures.

SRO/STA OJT Manual -50 January 1990

UNIT 2 OPS/21

· . . · · · · ·

v. .

·

.

.

•

•

•

å
C. Practical Requirements

<u>ITEM</u>

.

- 223.1 Discuss requirements for Primary and Secondary Containment Integrity
- 223.2 Monitor the containment atmosphere for proper concentrations of H₂ and O₂ per NMP Technical Specifications

UNIT 2 OPS/21

SRO/STA OJT Manual -51 January 1990

ACTION CODE

D

Ρ

÷ ,

,

* .

1

W

. .

•

Student's Name		
<u>SYSTEM 2</u>	23 CONTAINMENT SYSTEMS	
223.1Eva 223.2Eva	D luator P luator	Date Date
Knowledge Complet OLT-19	e: Instructor Signature	Date
Knowledge Complet OLT-23	e: Instructor Signature	Date
Task Complete:	Training Supervisor	Date
Task Qualified:	Department Supervisor	Date

SRO/STA OJT Manual -52 January 1990

٠

UNIT 2 OPS/21

a' .

•

4

•

,

.

t

.

.

*

J

• 7

۲

¥

NINE MILE POINT UNIT II

SRO/STA CANDIDATE

OJT MANUAL

I. SYSTEM 234 FUEL HANDLING EQUIPMENT

II. SYSTEM REFERENCES

- A. NMPII FSK, LSK, ESK Drawings
- B. NMPII Operating Procedure N2-OP-39
- C. NMPII Technical Specifications
- D. NMPII Licensed Operator Text FHE

III. TASK OBJECTIVES

At the completion of this task, the student will be able to perform all . evolutions associated with the system listed under Practical Requirements.

IV. TASK PERFORMANCE_CRITERIA

A. Knowledge Requirements

The student will have demonstrated satisfactory knowledge of the Fuel Handling Equipment by attending the Operator Training lecture and satisfactorily completing a written examination on the following:

1. OLT-2

B. Standards for Acceptable Task Performance

Each practical requirement will be considered satisfied if all actions taken by the candidates are in accordance with approved NMPC procedures.

SRO/STA OJT Manual -53 January 1990

UNIT 2 OPS/21

. ~ .

٩ 8

1

•

.

. .

a

ø

1*

.

•

1

' \ .

.

C. Practical Requirements

	ITEM	ACTION CODE
234.1	Supervise Shutdown of the Refuel Bridge	P/S+
234.2	Direct required bridge and grapple tests/checks	P/S+
234.3	Direct control rod removal/replacement	P/S+
234.4	Direct performance of operability test for refueling bridge (N2-OP-39)	P/S+
234.5	Direct Channel/De-Channel fuel bundle operations with fuel prep machine	P/S+
234.6	Direct transfer of fuel to/from spent fuel pool	P/S+
234.7	Direct operation of the fuel handling bridge auxiliary crane	P/S+
234.8	Discuss the Technical Specifications associated with refueling	D+
234.9	Discuss the manning requirements associated with refueling operations	D+

+Indicates tasks required to be performed/simulated in the Plant.

UNIT 2 OPS/21

.

SRO/STA OJT Manual -54 January 1990

P

, ,

.

,

•

,

•

Student's Name

	SYSTEM 234 FUEL HANDI	ING EQUIPMENT	
234.1		P/S+	
004 0	Evaluator	D/C.'	Date
234.2	Evaluator	P/5+	Date
234.3	·····	P/S+	
234.4	Evaluator	P/S+	Date
	Evaluator	0/0	Date
34.5	Evaluator	P/S+	Date
34.6		P/S+	
34.7	Evaluator	P/S+	Date
	Evaluator		Date
34.8	Evaluator	U+	Date
34.9		D+	
ત્ર	Evaluator		Date
(nowledge	e Complete:		
DLT-2	Instructor	Signature	Date
ask Com	plete:		
	Training S	Supervisor	Date
Task Qua'	lified:		٠
	Dem	Cumanulana	Data

Department Supervisor

Date

UNIT 2 OPS/21

SRO/STA OJT Manual -55 January 1990

" •

· · ·

e (j

•

NINE MILE POINT UNIT II

SRO/STA CANDIDATE

OJT MANUAL

I. SYSTEM 261 STANDBY GAS TREATMENT SYSTEM

II. REFERENCES

- A. NMPII Operating Procedure N2-OP-61B
- B. NMPII Licensed Operator Text GTS
- C. NMPII FSK, LSK, ESK Drawings
- D. NMPII Surveillance Test Procedures
- E. NMPII Technical Specifications

III. TASK OBJECTIVES

At the completion of this task, the student will be able to perform all evolutions associated with the system listed under Practical Requirements.

IV. TASK PERFORMANCE CRITERIA

A. Knowledge Requirements

The student will have demonstrated satisfactory knowledge of the Standby Gas Treatment System by attending the Operator Training lecture and satisfactorily completing a written examination on the following:

1. OLT-24

B. Standards for Acceptable Task Performance

Each practical requirement will be considered satisfied if all actions taken by the candidates are in accordance with approved NMPC procedures.

3

UNIT 2 OPS/21

SRO/STA OJT Manual -56 January 1990

. . · · · ·

1

•

*

, ø

.

¥. .

C. Practical Requirements

D

٠. ،

ITEM

261:1

Read and discuss the Technical Specifications operability requirements of the Standby Gas Treatment System

.

. T

UNIT 2 OPS/21

4

SRO/STA OJT Manual -57 January 1990

، د ب

· · ·

*

,

· · · ·

.

ĸ

Student's Name		
SYSTEM 261	STANDBY GAS TREATMENT SYSTEM	
261.1Evaluat	or D	Date
Knowledge Complete:	Instructor Signature	Date
Task Complete:	Training Supervisor	Date
Task Qualified:	Department Supervisor	Date ·

SRO/STA OJT Manual -58 January 1990

UNIT 2 OPS/21

. , · ·

· .

۰. ۶ ۲

,

NINE MILE POINT UNIT II

SRO/STA CANDIDATE

OJT MANUAL

AC ELECTRICAL DISTRIBUTION SYSTEMS I. SYSTEM 262

II. REFERENCES

- NMPII Operating Procedure N2-OP-68, 70, 71, 72 Α.
- NMPII Licensed Operator Text NORM AC, EJS-ENS Β.
- С.
- NMPII FSK, LSK, ESK Drawings NMPII Technical Specifications D.

III.TASK OBJECTIVES

At the completion of this task, the student will be able to perform all evolutions associated with the system listed under Practical Requirements.

IV. TASK PERFORMANCE CRITERIA

Α. Knowledge Requirements

> The student will have demonstrated satisfactory knowledge of the AC Electrical Distribution System by attending the Operator Training lecture and satisfactorily completing a written examination on the following:

1. **OLT-66** 2. **OLT-67**

Standards for Acceptable Task Performance Β.

Each practical requirement will be considered satisfied if all actions taken by the candidates are in accordance with approved NMPC procedures.

-59

January 1990

SRO/STA OJT Manual

UNIT 2 OPS/21

1

) .

.

. , •

. · · 1

3

· · · ·

.

•

n

C. Practical Requirements

ITEM

ŧ

ACTION CODE

262.1 Monitor AC and Emergency AC Distribution Systems for Technical Specifications operability requirements Ρ

UNIT 2 OPS/21

SRO/STA OJT Manual -60 January 1990

*

٠ , , . •

• • •

-

,

,

÷

,

. ĩ

Student's Name

SYSTEM 262 AC ELECTRICAL DISTRIBUTION SYSTEMS

262.1Evaluator	P`	Date
Knowledge Complete: OLT-66	Instructor Signature	Date
Knowledge Complete: OLT-67	Instructor Signature	Date
Task Complete:	Training Supervisor	Date
Task Qualified:	Department Supervisor	Date

SRO/STA OJT Manual -61 January 1990

UNIT 2 OPS/21

•

· · ·

·

, , r

.

· •

NINE MILE POINT UNIT II

SRO/STA CANDIDATE

OJT MANUAL

I. SYSTEM 263 DC ELECTRICAL DISTRIBUTION SYSTEMS

II. REFERENCES

- A. NMPII Operating Procedure N2-OP-73A, 73B, 74A, 74B
- B. NMPII Licensed Operator Text BYS/BWS
- C. NMPII FSK, LSK, ESK Drawings
- D. NMPII Technical Specifications

III. TASK OBJECTIVES

At the completion of this task, the student will be able to perform all evolutions associated with the system listed under Practical Requirements.

IV. TASK PERFORMANCE CRITERIA

A. Knowledge Requirements

The student will have demonstrated satisfactory knowledge of the DC Electrical Distribution System by attending the Operator Training lecture and satisfactorily completing a written examination on the following:

1. OLT-68

B. Standards for Acceptable Task Performance

Each practical requirement will be considered satisfied if all actions taken by the candidates are in accordance with approved NMPC procedures.

-62

UNIT 2 OPS/21

SRO/STA OJT Manual

January 1990

· · · ·

.

κ.

.

.

,

.

لم

۴,

.

C. Practical Requirements

ITEM

263.1 Monitor the DC Distribution System for Technical Specification operability requirements

Ρ

ACTION CODE

UNIT 2 OPS/21

SRO/STA OJT Manual -63 January 1990

•

.

4

U

.

.

• 4

•

,

Student's Na	me	
--------------	----	--

SYSTEM 263 DC ELECTRICAL DISTRIBUTION SYSTEMS

263.1	Р	<u></u>
Evaluator	•	Date
•		
Knowledge Complete: OLT-68	Instructor Signature	Date
Task Complete:	Training Supervisor	Date
Task Qualified:	Department Supervisor	Date

SRO/STA OJT Manual -64 January 1990

UNIT 2 OPS/21

• . e.

•

. r . •

•

÷

NINE MILE POINT UNIT II

SRO/STA CANDIDATE

OJT MANUAL

I. SYSTEM 264 EMERGENCY DIESEL GENERATORS

II. REFERENCES

- A. , NMPII Operating Procedure N2-OP-100A, 100B
- NMPII Licensed Operator Text EGD, EGS Β.
- С.
- NMPII FSK, LSK, ESK Drawings NMPII Technical Specifications D.
- NMPII Surveillance Test Procedures Ε.

III.TASK OBJECTIVES

At the completion of this task, the student will be able to perform all evolutions associated with the system listed under Practical Requirements.

IV. TASK PERFORMANCE CRITERIA

Α. Knowledge Requirements

> The student will have demonstrated satisfactory knowledge of the Emergency Diesel Generator System by attending the Operator Training lecture and satisfactorily completing a written examination on the following:

1. **OLT-17** 2. **OLT-18**

Β. Standards for Acceptable Task Performance

Each practical requirement will be considered satisfied if all actions taken by the candidates are in accordance with approved NMPC procedures.

UNIT 2 OPS/21

SRO/STA OJT Manual -65 January 1990 3.

. • • • .

C. Practical Requirements

<u>ITEM</u>

Discuss the Technical Specification operability requirements for the Emergency Diesel Generators 264.1

UNIT 2 OPS/21

SRO/STA OJT Manual -66 January 1990

ייכ ר () סם ACTION CODE

Ρ

. • · · ·

4 st

·

SYSTEM 264	EMERGENCY DIESEL GENERATORS	
264.1Evaluat	or P	Date
Knowledge Complete: OLT-17	Instructor Signature	Date
Knowledge Complete: OLT-18	Instructor Signature	Date
Task Complete:	Training Supervisor	Date
Task Qualified:	Department Supervisor	Date

UNIT 2 OPS/21

SRO/STA OJT Manual -67 January 1990

*,

.

,

42

۰

4

.

•

p

.

•

f

•

NINE MILE POINT UNIT II ·

SRO/STA_CANDIDATE

OJT MANUAL

I. <u>SYSTEM 271</u> OFFGAS SYSTEM

II. <u>REFERENCES</u>

- A. NMPII Operating Procedure N2-OP-42
- B. NMPII Licensed Operator Text OFG
- C. NMPII FSK, LSK, ESK Drawings
- D. NMPII Technical Specifications

III. TASK OBJECTIVES

At the completion of this task, the student will be able to perform all evolutions associated with the system listed under Practical Requirements.

IV. TASK PERFORMANCE CRITERIA

A. Knowledge Requirements

The student will have demonstrated satisfactory knowledge of the Offgas System by attending the Operator Training lecture and satisfactorily completing a written examination on the following:

1. OLT-52

B. Standards for Acceptable Task Performance

Each practical requirement will be considered satisfied if all actions taken by the candidates are in accordance with approved NMPC procedures.

SRO/STA OJT Manual -68 January 1990

UNIT 2 OPS/21

•

۲. ۲. ۲.

· · · ·

×

.

.

.

.

د

۰,۵
C. Practical Requirements

ACTION CODE

- Discuss the radioactivity release rate limits imposed by Technical Specifications whenever the Off-Gas System is in operation 271.1

D

UNIT 2 OPS/21

SRO/STA OJT Manual January 1990 -69

ITEM

Ţ

.

•

4

.

. ¥

* •

.

•

.

.

Student's Name		
<u>SYSTEM 271</u> 271.1 	OFFGAS_SYSTEM D tor	Date
Knowledge Complete:_ OLT-52	Instructor Signature	Date
Task Complete:	Training Supervisor	Date
Task Qualified:	Department Supervisor	Date

SRO/STA OJT Manual -70 January 1990

.

UNIT 2 OPS/21

• • • •

• · · ·

4

.

`

ø

NINE MILE POINT UNIT II

SRO/STA CANDIDATE

OJT MANUAL

I. SYSTEM 286 FIRE PROTECTION SYSTEMS

II. SYSTEM REFERENCES

- A. NMPII FSK, LSK, ESK Drawings
- B. NMPII Operating Procedure N2-OP-43, 44, 45, 46, 47
- C. NMPII Licensed Operator Text FPS
- D. NMPII Technical Specifications

III. TASK OBJECTIVES

At the completion of this task, the student will be able to perform all evolutions associated with the system listed under Practical Requirements.

IV. TASK PERFORMANCE CRITERIA

A. Knowledge Requirements

The student will have demonstrated satisfactory knowledge of the Fire Protection System by attending the Operator Training lecture and satisfactorily completing a written examination on the following:

1. OLT-75

B. Standards for Acceptable Task Performance

Each practical requirement will be considered satisfied if all actions taken by the candidates are in accordance with approved NMPC procedures.

3

UNIT 2 OPS/21

SRO/STA OJT Manual -71 January 1990

. 4 , , , , , , , . . . 9 . .

C. Practical Requirements

ITEM

286.1 Discuss the Technical Specification Operability requirements for the Fire Protection System System is in operation CODE D

ACTION

1

SRO/STA OJT Manual -72 January 1990

UNIT 2 OPS/21

-

Ĩ

۰. ۸

, , , ,

. .

.

, , ,

Student's Nam	e	
SYSTEM	286 FIRE PROTECTION SYSTEM	
286.1Ev	aluator D	Date
Knowledge Comple	te:	
UL1-/5	Instructor Signature	, Date
Task Complete:		
	Training Supervisor	Date
Task Qualified:		
	Department Supervisor	Date

×

SRO/STA OJT Manual -73 January 1990

UNIT 2 OPS/21

,

ч н ч

* * -

i

.

•

.

8

,

× .

NINE MILE POINT UNIT II

SRO/STA CANDIDATE

OJT MANUAL

I. SYSTEM 288 PLANT VENTILATION SYSTEMS

II. SYSTEM REFERENCES

- NMPII FSK, LSK, ESK Drawings Α.
- NMPII Operating Procedures N2-OP-42, 43A, 54A, 54B, 55, 57, 58, Β. 59A, 59B, 59C.1, 59C.2, 59C.3, 59C.4, 59C.5, 59C.6, 61B NMPII Licensed Operator Text - HVR, HVT, CRE, GTS
- С.
- NMPII Surveillance Procedures D.
- Ε. NMPII Technical Specifications

III. TASK OBJECTIVES

At the completion of this task, the student will be able to perform all evolutions associated with the system listed under Practical Requirements.

IV. TASK PERFORMANCE CRITERIA

· A. Knowledge Requirements

> The student will have demonstrated satisfactory knowledge of the Plant Ventilation Systems by attending the Operator Training lecture and satisfactorily completing a written examination on the following:

- 1. **OLT-24 OLT-70** 2.
- 3. 0LT-71
- 4. **OLT-95**
- Standards for Acceptable Task Performance Β.

Each practical requirement will be considered satisfied if all actions taken by the candidates are in accordance with approved NMPC procedures.

UNIT 2 OPS/21

SRC/STA OJT Manual -74 January 1990

¥

, .

,

, ,

. . *

a

\$

•

x

.

C. Practical Requirements

<u>ITEM</u>

288.1 Discuss the Technical Specification operability requirements associated with the Secondary Containment Ventilation

ACTION

CODE

Ρ

Ρ

3

- 288.2 Discuss the Technical Specification operability requirements associated with the Control Room Outdoor Air Special Filter Train
- 288.3 (Deleted)

UNIT 2 OPS/21

SRO/STA OJT Manual -75 January 1990

,

μ

e P N

· · · · · . . . • • •

. '

.

<u>SYSTEM 288</u>	PLANT VENTILATION SYSTEMS	
8.1	.p	
Evalua	tor	Date
8.2 <u> </u>	μ tor	Date
.3 DELETED*	D	XXXXXX
Evalua	tor	Date
* Task d	eleted repeat of task 261.1	
owledge Complete:_ [-24	Instructor Signature	Date
owledge Complete:_ T-70	Instructor Signature	Date
owledge Complete:_	·	
-71	Instructor Signature	Date
owledge Complete:_ T-95	Instructor Signature	Date
sk Complete:		
sk comprete	Training Supervisor	Date
sk Qualified:		
	Department Supervisor	Date

UNIT 2 OPS/21

71

•

SRO/STA OJT Manual -76 January 1990

Ŧ

.

•

NINE MILE POINT UNIT II

SRO/STA CANDIDATE

OJT MANUAL

I. <u>SYSTEM 291</u> <u>SUMP AND DRAIN SYSTEMS</u>

II. SYSTEM REFERENCES

- A. NMPII FSK, LSK, ESK Drawings
- B. NMPII Operating Procedures N2-OP-67
- C. NMPII Licensed Operator Text Normal Building Drains
- D. NMPII Technical Specifications

III.TASK OBJECTIVES

At the completion of this task, the student will be able to perform all evolutions associated with the system listed under Practical Requirements.

IV. TASK PERFORMANCE CRITERIA

A. Knowledge Requirements

The student will have demonstrated satisfactory knowledge of the Sump and Drain Systems by attending the Operator Training lecture and satisfactorily completing a written examination on the following:

1. OLT-74

B. Standards for Acceptable Task Performance

Each practical requirement will be considered satisfied if all actions taken by the candidates are in accordance with approved NMPC procedures.

UNIT 2 OPS/21

SRO/STA OJT Manual -77 January 1990



· · ·

.

C. Practical Requirements

<u>I TEM</u>

291.1 Discuss the Technical Specification requirements for Primary Leak Rate Limits

<u>CODE</u> P

ACTION

UNIT 2 OPS/21

۰.

SRO/STA OJT Manual -78 January 1990

.

Student's Name		
SYSTEM	291 SUMP AND DRAIN SYSTEMS	
291.1Ev	aluator P	Date
Knowledge Complete OLT-74	: Instructor Signature	Date
Task Complete:	Training Supervisor	Date
Task Qualified:	Department Supervisor	Date

UNIT 2 OPS/21

SRO/STA OJT Manual -79 January 1990

• , **n**

)

.

ba

. .

.

•

•

,

NINE MILE POINT UNIT II

SRO/STA CANDIDATE

OJT MANUAL

REMOTE SHUTDOWN SYSTEM SYSTEM 296 I.

II. SYSTEM REFERENCES

- NMPII FSK, LSK, ESK Drawings Α.
- NMPII Operating Procedures N2-OP-78 Β.
- NMPII Licensed Operator Text RSS С.
- NMPII Technical Specifications D.

III.TASK OBJECTIVES

At the completion of this task, the student will be able to perform all evolutions associated with the system listed under Practical Requirements.

IV. TASK PERFORMANCE CRITERIA

Α. Knowledge Requirements

> The student will have demonstrated satisfactory knowledge of the Remote Shutdown System by attending the Operator Training lecture and satisfactorily completing a written examination on the following:

OLT-36 1.

Β. Standards for Acceptable Task Performance

Each practical requirement will be considered satisfied if a]] actions taken by the candidates are in accordance with approved NMPC procedures.

January 1990

UNIT 2 OPS/21

ar .

•

• ·

C. Practical Requirements



3

3

3

<u>ITEM</u>

296.1 (Deleted)

- 296.2 (Deleted)
- 296.3Discuss the Technical Specification operability
requirements for the Remote Shutdown System
Instrumentation and ControlsP/S+296.4Perform the actions of the SSS/ASSS during a
Control Room Evacuation with the reactor S/DP/S+296.5Perform the actions of the SSS/ASSS during a
Control Room Evacuation with the reactor not S/DP/S+

+Indicates tasks required to be performed/simulated in the Plant.

SRO/STA OJT Manual -81 January 1990

UNIT 2 OPS/21

saag*un −*001.

9

. . .

. .

.

5

°

• • •

.

Student's Name

	SYSTEM 296 REMOTE SHUTDO	WN SYSTEM		
296.1	DELETED		XXXXXX	
	Evaluator		Date	
296.2	DELETED		<u> </u>	
_	Evaluator		Date	I
296.3	<u></u>	P/S+		
	Evaluator		Date	1
296.4		P/S+	<u>.</u>	
	Evaluator		Date	3
296.5		P/S+		
	Evaluator		Date	
Knowled OLT-36	owledge Complete: T-36 Instructor Signature		Date	
Task Co	mplete:Training Supe	rvisor	Date	
Task Qu	alified:			

Department Supervisor

Date

SRO/STA OJT Manual -82 January 1990

UNIT 2 OPS/21

. .

n 16 n⊕ () 1, 19

, ,

i<u>r</u>

+

í

٤ 1 ا (1) 0988 - 555 76200 - 7 - 7

.

.

.

а . .

. . .

•

u

•

J

NINE MILE POINT UNIT II

SRO/STA CANDIDATE

OJT MANUAL

I. SYSTEM 341 NORMAL OPERATIONS

II. SYSTEM REFERENCES

Due to the broad spectrum of tasks identified under this system, it is not practical to list all references. The list of references for this system would include, but are not limited to, the following:

Operating Procedures for NMPII Final Safety Analysis Report Technical Specifications Emergency Plan and procedures Emergency Operating procedures Radiation Protection Procedures FSK, LSK, ESK Drawings Administrative Procedures

III.TASK OBJECTIVES

At the completion of this task, the student will be able to perform all evolutions associated with the system listed under Practical Requirements.

IV. TASK PERFORMANCE CRITERIA

A. Knowledge Requirements

There are no testable knowledge requirements for this section. Knowledge is gained and tested by satisfactory performance of designated tasks on shift or in the simulator.

B. Standards for Acceptable Task Performance

Each practical requirement will be considered satisfied if all actions taken by the candidate are in accordance with approved NMPC Procedures, and if equipment damage or personal injury do not occur as a result of these actions.

3

SRO/STA OJT Manual -83 January 1990

UNIT 2 OPS/21

• •

• h i ۰ ۰ ۰ ę

.` .

,

4

. ,

• . . 1

C. Practical Requirements

	ITEM	ACTION CODE
341.1	Conduct shift and relief turnover	P+
341.2	Maintain required logs, records and status boards	Р+
341.3	Authorize containment/drywell entry and exit	P/S+
341.4	Review operating logs for trends and out-of-specification conditions	P/S+
341.5	Approve jumper and lifted lead removal/placement	P/S+
341.6	Prepare an Occurrence Report	P/S+
341.7	Monitor plant chemistry to ensure conformance to specifications	P/S+
341.8	Evaluate plant systems performance and coordinate appropriate actions per Technical Specifications in the event an LCO is entered/not satisfied	Р
341.9	Authorize termination/reset/bypass of engineered safety features functions	P/S
341.10	Authorize bypass of an RPS channel from a trip condition (prevent activation)	, P
341.11	Conduct refuel shift supervisor operations including turnover	P/S+
341.12	Direct Plant Equipment Operators in the performance of their duties	P+
341.13	Direct the start-up of a system (i.e. pumps)	Р
341.14	Direct a reactor start-up to point of adding heat	Ρ
341.15	Monitor normal operation in the Control Room	ρ+
341.16	Monitor normal operation functions outside the Control Room	P+
341.17	Direct the removal of a system from service	۴
341.18	Direct the removal of a recirc pump from service	Ρ
341.19	Conduct a visual inspection of a system	P+
	,	

+Indicates tasks required to be performed/simulated in the Plant.

SRO/STA OJT Manual -84 January 1990

UNIT 2 OPS/21

.

,

n

.

*

• • •

я

-.t

С.	Prac	tical Requirements (Cont'd)	ACTION
		ITEM	CODE
341.	20	Authorize and direct de-energizing or energizing of electrical buses (including vital and nonvital, AC and DC isolation, etc.)	P/S
341.	21	Evaluate plant conditions and coordinate appropriate actions per plant Technical Specifications in the event a LS3 is reached and/or exceeded	P/S
341.	22	Direct shift personnel actions during major plant evolutions	Р
341.	23	Apply Technical Specifications directions for safety limits, LS3, LCO	P/S
341.	24	Direct operating shift to carry out actions required by operations orders/memos	P/S+
341.	25	Review the plant status and planned shift activities with plant management	P/S+
341.	26	Evaluate potential industrial hazards for operations work assignments	P/S+
341.	27	Conduct housekeeping inspections as plant management	P/S+
341.	28	Interpret and ensure compliance w/plant Admin Procedure during normal and off-normal plant operations	s P/S
341.	29¦	Direct the manual control of Feedwater during a Reactor startup and/or shutdown	Ρ
•341.	30	Direct Reactor Power changes (greater than 10%) using either Recirc Flow in manual or rods	Ρ

+Indicates tasks required to be performed/simulated in the Plant.

SRO/STA OJT Manual -85 January 1990

UNIT 2 OPS/21

1111**1,000 (0**1- -9-

a Carrano - amigera di mer

64004 e mar

-

- 340 A Q - 16 - 39 - F

. . 1995 - 1995

-

,.....

• **0 W**ét 43

9 P. 8 Au - 1

ية : - في ع ح

يون المديني و مراسمو و رسمو مي مير سيوم . و الد ال ال •

دور در معمد مدموم . معمد معمد معمد معمود . م A.

Student's Name

NORMAL OPERATIONS SYSTEM 341 P+ 341.1 Evaluator P+ 341.2 Evaluator 341.3 P/S+ Evaluator P/S+ 341.4 Evaluator P/S+ 341.5 Evaluator 341.6 P/S+ Evaluator P/S+ 341.7 Evaluator Ρ 341.8 Evaluator 341.9 P/S Evaluator Ρ 341.10 Evaluator P/S+ 341.11 Evaluator P+ 341.12 Evaluator Ρ 341.13 Evaluator Ρ 341.14 Evaluator P+ 341.15 Evaluator 341.16 P+ Evaluator Ρ 341.17 Evaluator Ρ 341.18 t Evaluator P+ 341.19 Evaluator P/S 341.20 Evaluator P/S 341.21 Evaluator Ρ 341.22 Evaluator

Date Date

UNIT 2 OPS/21

SRO/STA OJT Manual -86 January 1990

-

r de Labor - The S. of State of

2000 B K + -4 2

.

with the last is that is the second

1

,

۰.

1

h

·

·

. -

н. Н

, F

i
Student's Name

SYSTEM 341 NORMAL OPERATIONS 341.23 P/S· Evaluator Date 341.24 P/S+ Evaluator Date 341.25 P/S+ Evaluator Date 341.26 P/S+ Evaluator Date 341.27 P/S+ Evaluator Date P/S 341.28 Evaluator Date 341.29 Ρ Evaluator Date 341.30 Ρ Evaluator Date Task Complete:_____ Training Supervisor Date Task Qualified:_____ Department Supervisor Date

۰.

SRO/STA OJT Manual -87 January 1990

• •

ueas/ ≠0a \

lla aront versenses

.ศกรรม. รัฐาณระชาว

Dis Die W Dis Die W Dis Die Weet MMPC Dis Die Die Die Steue

. U

.

, , ,

, , , ,

NINE MILE POINT UNIT II

SRO/STA CANDIDATE

OJT MANUAL

I. SYSTEM 342 MAINTENANCE AND SURVEILLANCE

II. SYSTEM REFERENCES

Due to the broad spectrum of tasks identified under this system, it is not practical to list all references. The list of references for this system would include, but are not limited to, the following:

Operating Procedures for NMPII Final Safety Analysis Report Technical Specifications Emergency Plan and procedures Emergency Operating procedures Radiation Protection Procedures FSK, LSK, ESK Drawings Administrative Procedures

III.TASK OBJECTIVES

At the completion of this task, the student will be able to perform all evolutions associated with the system listed under Practical Requirements.

IV. TASK PERFORMANCE CRITERIA

A. Knowledge Requirements

There are no testable knowledge requirements for this section. Knowledge is gained and tested by satisfactory performance of designated tasks on shift or in the simulator.

B. Standards for Acceptable Task Performance

Each practical requirement will be considered satisfied if all actions taken by the candidate are in accordance with approved NMPC Procedures, and if equipment damage or personal injury do not occur as a result of these actions.

UNIT 2 OPS/21

SRO/STA OJT Manual -88 January 1990

יני גונ ג

- 151

. ;• 、

·

--

. .

ŗ

s

C. Practical Requirements

	ITEM	ACTION CODE
342.1	Determine priority of maintenance activities performed on shft	P/S+
342.2	Coordinate plant operation to support maintenance activities	P/S+
342.3	Approve requests to remove plant equipment from operation including markups	P/S+
342.4	Review and authorize tagging equipment removal and restoration requests for plant equipment	P+
342.5	Prepare maintenance work requests	P+ '
342.6	Review maintenance work requests, up to and including final sign-off	р ₊
342.7	Authorize performance of maintenance on shift (including preventative maintenance)	° P∕S+
342.8	Approve Radiation Work Permits	P/S+
342.9	Monitor the conduct of Operations Preventive Maintenance on shift	P/S+
342.10	Verify post-maintenance operability of safety-related equipment	P/S+
342.11	Approve a welding/burning/grinding permit	P/S+
342.12	Approve boundary breaching/penetration permits (e.g. barriers, ventilation, structural)	P/S+
342.13	Provide technical assistance in troubleshooting system malfunctions	P/S+
342.14	Prioritize, authorize and review performance of surveillance tests on shift	P+
342.15	Coordinate testing done by technicians (as opposed to operators)	P/S+
342.16	Verify Radwaste sample tank meets discharge permit requirements	P/S+

+Indicates tasks required to be performed/simulated in the Plant.

SRO/STA OJT Manual -89 January 1990

n In drawdaana Leka, para III yn - 4 - 4 - 4

----. .

A., PARIA 10 10 17

entres services de la seguina de la se

•

Arminia Palago arama a farina g

----- P

.

• -----

• ----V 10 #

,

- , ma ch

٠

بر بیر**ست، می** *۲

۴

·····

.

¢

÷

.

.

•

,

Student's Name

	<u>SYSTEM 342</u>	MAINTENANCE AND SURVEILLANCE	
342.1		P/S+	
342.2	Evaluator	P/S+	Date
242 2	Evaluato	р/с.	Date
542.5	Evaluato	P75+	Date
342.4	Evaluator	······································	Date
342.5	Evaluato	P+	Date
342.6		P+	Date
342.7		P/S+	
342.8	Evaluato	r P/S+	Date
342 9	Evaluato	р/с _т	Date
242 10	Evaluato	D/C.	Date
11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Evaluator	r/s+	Date
342.11	Evaluator	P/S+	Date
342.12	Evaluato	P/S+	Date
342.13	Fuelueto	P/S+	
342.14		P+	Date
342.15	Evaluato	P/S+	Date
342 16	Evaluator	P/S+	Date
542.10	Evaluator	F/ 5+	Date
Fask Con	nplete:	Training Supervisor	Date
ſask Qua	alified:	Department Supervisor	Date

.

1 10 NOT

lis suc X +acres

• •

1.60-700 30 0.00

•

The off off and a second where a second where a second a

, , ,

.

-

·

NINE MILE POINT UNIT II

SRO/STA CANDIDATE

OJT MANUAL

I. SYSTEM 343 ADMINISTRATIVE

II. SYSTEM REFERENCES

Due to the broad spectrum of tasks identified under this system, it is not practical to list all references. The list of references for this system would include, but are not limited to, the following:

Operating Procedures for NMPII Final Safety Analysis Report Technical Specifications Emergency Plan and procedures Emergency Operating procedures Radiation Protection Procedures FSK, LSK, ESK Drawings Administrative Procedures

III.TASK OBJECTIVES

At the completion of this task, the student will be able to perform all evolutions associated with the system listed under Practical Requirements.

IV. TASK PERFORMANCE CRITERIA

A. Knowledge Requirements

There are no testable knowledge requirements for this section. Knowledge is gained and tested by satisfactory performance of designated tasks on shift or in the simulator.

B. Standards for Acceptable Task Performance

Each practical requirement will be considered satisfied if all actions taken by the candidate are in accordance with approved NMPC Procedures, and if equipment damage or personal injury do not occur as a result of these actions.

SRO/STA OJT Manual -91 January 1990

+ × ° ۲<u>،</u>

.

.

252 . . 4

• • • •

3 ж .

. •

•

· · · ·

.

•

C. Practical Requirements

	ITEM	ACTION CODE
343.1	Direct shift personnel assignments	P/S+
343.2	Authorize overtime for operations personnel	P/S+
343.3	Prepare a Personnel Accident Report	P/S+
343.4	Approve a temporary change to a procedure	P/S+
343.5	Write operational reports (i.e. Occurrence Event Reports, Plant Trip/Scram Reports)	P/S+
343.6	Prepare the Unit Morning Report	P/S+
343.7	Issue Administratively Controlled Keys	P+ .
343.8	Conduct periodic audit of temporary modifications	P/S+
343.9	Conduct periodic audit of tagging log	P/S+
343.10	Conduct shift meetings on industrial safety	P+
343.11	Review the Operator Aid Log	P+

SRO/STA OJT Manual -92 January 1990

ب - + منه (منتخله معمد معرود) ⁷⁶ لي

*

r

•

.

•

.

Student's Name

<u>SYSTEM 343</u> ADMINISTRATIVE

43.1 _	•	F
-	Evaluator	
43.2 _	Evaluator	ŀ
43.3		P
40.4	Evaluator	
43.4 _	Evaluator	H
43.5 _		F
	Evaluator	
43.0 _	Evaluator	ŀ
43.7		P
12 0	Evaluator	
+3.8 _	Evaluator	· · · · · ·
13.9 _		P
12 10	Evaluator	
43.10 _	Evaluator	۴
43.11		P
	Evaluator	

Date	
Date	
Date	_
Date	_
Date	_
Date	

Task Complete:_____ Training Supervisor Date

Task Qualified:_____

Department Supervisor

Date

UNIT 2 OPS/21

SRO/STA OJT Manual -93 January 1990

.

an all register in a sub-The All cont

.

is michar

160130517

101 Dar .

POLIDƏS .

05

s s s of if all
 v ifth app oved WAPC
 v fight sproved WAPC

,

;.

.

.

f

, ,

ι, . .

·

c

NINE MILE POINT UNIT II

SRO/STA CANDIDATE

OJT MANUAL

I. <u>SYSTEM 344</u> <u>EMERGENCY OPERATIONS</u>

II. SYSTEM REFERENCES

Due to the broad spectrum of tasks identified under this system, it is not practical to list all references. The list of references for this system would include, but are not limited to, the following:

Operating Procedures for NMPII Final Safety Analysis Report Technical Specifications Emergency Plan and procedures Emergency Operating procedures Radiation Protection Procedures FSK, LSK, ESK Drawings Emergency operations Procedures

III. TASK OBJECTIVES

At the completion of this task, the student will be able to perform all evolutions associated with the system listed under Practical Requirements.

IV. TASK PERFORMANCE CRITERIA

A. Knowledge Requirements

There are no testable knowledge requirements for this section. Knowledge is gained and tested by satisfactory performance of designated tasks on shift or in the simulator.

B. Standards for Acceptable Task Performance

Each practical requirement will be considered satisfied if all actions taken by the candidate are in accordance with approved NMPC Procedures, and if equipment damage or personal injury do not occur as a result of these actions.

UNIT 2 OPS/21

ł

SRO/STA OJT Manual -94 January 1990















۲ ۳ ۰

. **(** ,

,

C. Practical Requirements

.

	· · · · · · · · · · · · · · · · · · ·	ACTION
	ITEM	<u>CODE</u>
344.1	Analyze indications to determine that an off-normal plant event is in progress	Ρ
344.2	Direct shift personnel actions to ensure plant safety during off-normal conditions	Ρ
344.3	Ensure required notifications of on-site and off-site personnel for off-normal events are performed	Ρ
344.4	Analyze indications to determine the cause of the off-normal event	Ρ
344.5	Direct corrective actions to mitigate the consequences of the abnormal event	Ρ
344.6	Direct actions to ensure that adequate Core Cooling is maintained during an abnormal event	Ρ
344.7	Analyze indications to determine that an Emergency Plan Event is in progress	Ρ
344.8	Direct shift personnel actions to ensure plant safety during emergency conditions	Ρ
344.9	Provide technical data and information to plant management during the emergency event	Ρ
344.10	Evaluate Plant Personnel Safety and Radiological Hazards associated with the Emergency Event and recommend evacuation as necessary	P/S+
344.11	Perform required actions during a fire	Ρ
344.12	Perform actions required for an inadvertent criticality during fuel loading	P/S+
344.13 ⁻	Determine if indications of fuel element damage are present	Ρ
344.14	Direct Emergency Response as Site Emergency Director	Ρ
344.15	Classify Emergency Events requiring Emergency Plan Implementation	Ρ
344.16	Direct the actions of personnel as required by the actions stated in the applicable annunciator response procedures to restore system to proper operation	Ρ

,

SRO/STA OJT Manual -95 January 1990

UNIT 2 OPS/21

i

ŝ ý, ้า 4 ١ ę . ß

٢,

	C. Prac	tical Requirements	-
	0. mac	ITEM	ACTION CODE
	344.17	Make protective action recommendations as necessary per EPP's	P/S
	344.18	Perform actions required for a Station Evacuation	P/S
	344.19	Perform actions required for Radiation Emergencies	P/S
	344.20	Direct actions required for power oscillations experienced following a two Recirc Pump Trip Evolution	Ρ
	344.21	Direct RPV/Containment flooding as directed by the EOP's	Ρ
×	344.22	Direct the use of Suppression Pool Cooling per the EOP's	P/S
	344.23	Direct the use of Suppression Chamber Spray per the EOP's	P/S
	344.24	Direct the use of Drywell Spray per the EOP's	P/S
	344.25	Direct the áctions required for a Large Break LOCA inside the Containment	Ρ
	344.26	Direct the actions required for a Large Break LOCA outside the Containment	Ρ
	344.27	Direct the actions required for a small break LOCA inside the Containment	Ρ
	344.28	Direct the actions required for small break LOCA outside the Containment	Ρ
	344.29	Direct the actions required for a Loss of Instrument Air	Ρ
	344.30	Direct the actions required for a Loss of Electrical Power	Р
	344.31	Direct the actions required for a Loss of Core Coolant Flow	Ρ
	344.32	Direct the actions required for a Loss of Condenser Vacuum	Ρ
	344.33	Direct the actions required for a Loss of Service Water	Р
	344.34	Direct the actions required for a Loss of Shutdown Cooling	Ρ
	UNIT 2 OPS	SRO/STA OJT Manual -96 January 1990 /21	

•

• p •

10 <u>3.105</u>

: Q p k 4 -ļ 2 2 4

ι, . 1

ð м.,

C. Practical	Requirements	(Cont'd)
--------------	--------------	----------

С.	Practical Requirements (Contro)	ACTION
	ITEM	CODE
344.3	5 Direct the actions required for a Loss of RBCLC	Р
344.3	6 Direct the actions required for a Loss of Normal Feedwater or Normal Feedwater System Failure	Р
344.3	7 Direct the actions required for a Loss of all Feedwater	Ρ
344.3	8 Direct the actions required for a Loss of a Reactor Protective System Channel	P
344.3	9 Direct the actions required for a Stuck Control Rod/Control Rod Drop	Ρ
344.4	O Direct the actions required for an Inability to Drive Control Rods	Ρ
344.4	Direct the actions required for a Liquid Poison Injection	P
344.4	2 Direct the actions required for a Turbine Generator Trip .	Ρ
344.4	3 Direct the actions required for an Unexplained Core Reactivity Change	Р
344.4	4 Direct the actions required for a Malfunction in the Rx Pressure Control System (EHC)	Р
344.4	5 Direct the actions required for a Reactor Scram	β
344.4	6 Direct the actions required for a Main Steam Line Break	Р
344.4	7 Direct the actions required for a Loss of Flux Indication (APRM/LPRM Failure)	Ρ
344.4	B Direct the actions required for an Intrusion of Demineralizer Resin into the Primary System	Ρ
344.4	19 Discuss Emergency and Non-Emergency NRC notification requirements	D
344.5	50 Notify the NRC via ENS of an ESF actuation	P/S
344.9	51 Review and approve a Notification Fact Sheet for an emergency classification	Р

January 1990 SRO/STA OJT Manual -97

UNIT 2 OPS/21

. Í

۲ ۰.*

-9 * - • • . • A

Ģ ч., . 3 -

4 ę . • я · ы

s. ŝ, 1 Ì د به د

ų • 5 t

-} 6 4 2.30 ı.

C. Pra	actical Requirements (Cont'd)	ACTION
	ITEM	CODE
344.52	Complete an SSS/SED Checklist for Emergency Classification	Р
344.53	Perform a Walkdown of Components required to fill between MSIV's per EOP-MSL	P+
344.54	Direct actions as required per EOP-RQ	Ρ
344.55	Direct actions as required per EOP-RL	Р
344.56	Direct actions as required per EOP-RP	Ρ
344.57	Direct actions as required per EOP-DWT	Ρ
344.58	Direct actions as required per EOP-PCP	β
344.59	Direct actions as required per EOP-SPL	Р
344.60	Direct actions as required per EOP-SPT	Р
344.61	Direct actions as required per EOP-SCT	Ρ
344.62	Direct actions as required per EOP-SCL	Ρ
344.63	Direct actions as required per EOP-SCR	Р
344.64	Direct actions as required per EOP-RR	Ρ
344.65	Direct actions as required per EOP-MSL	Ρ
344.66	Direct actions as required per EOP-Cl Level Restoration	Ρ
344.67	Direct actions as required per EOP-C2 Emergency Depressurization	Ρ
344.68	Direct actions as required per EOP-C3 Steam Cooling	Р
344.69	Direct actions as required per EOP-C4 cooling without level	P
344.70	Direct actions as required per EOP-C5 alternate shutdown cooling	Р
344.71	Direct actions as required per EOP-C6 RPV flooding	Р
344.72	Direct actions as required per EOP-C7 Level/Power Control	Ρ
UNIT 2 O	SRO/STA OJT Manual -98 January 1990 PS/21	

•

۰. ۸

í

.



Ρ

<u>I TEM</u>

344.73

73 Provide technical assistance to the S.S.S. during accidents or abnormal events including restoration process (STA ONLY)

UNIT 2 OPS/21

į

SRO/STA OJT Manual -99 January 1990

րեպոլալատ ամսեալ հեշատել է ներ ։ ։ ։ and the function of the second s #≇ #nansta b t ສັນນະເປັນແມ່ ເຊັ່ນນີ້. ກັ່ງ ກັ່ງ 1 17 In the encoder of the state $d_{m, k}$, and $d_{m, k}$, and and the second sec -411 900 1 -1 -n, trans ann é ann p Fa b starra e ana a a a b ۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۱٫۰۰۰ ۲٫۰۰۰ Cat for the second s Para tributant baranan ar konst ar ing Sara Karana Karana چې د د د د د د مند او ده. ده مصفحه وله کمنې د هو د اول ا

non a sur proto a sur s

* * * * * * * * * * * * * - • • · - •

• • •

* \$ tr -44 ⊳ 49 *· · · · • • •

Ξ

,

•

- • •

* \$ *

Student's Name

| | SYSTEM 344 | EMERGENCY OPERATI | <u>LONS</u> | | |
|--------|------------|--|---------------|------|-----------|
| 344.1 | * | | P | | |
| 344 2 | Evaluator | | <u>—</u>
Р | Date | |
| 244.2 | Evaluator | ······································ | - ' | Date | |
| 344.3 | Evaluator | | P | Date | |
| 344.4 | Evaluator | <u> </u> | P | Date | |
| 344.5 | Fyaluator | ······································ | P | Date | <u> </u> |
| 344.6 | | <u> </u> | Ρ | | |
| 344.7 | Evaluator | · | P | | |
| 344.8 | Evaluator | | Р | Date | |
| 344.9 | Evaluator | | р | Date | |
| 244 10 | Evaluator | | - · | Date | |
| 544.10 | Evaluator | | F/3+ | Date | |
| 344.11 | Evaluator | | P | Date | ŋ |
| 344.12 | Evaluator | | P/S+ | Date | |
| 344.13 | Evaluator | | P | Data | |
| 344.14 | | | P | | |
| 344.15 | Evaluator | | P | Date | |
| 344.16 | Evaluator | | Р. | Date | |
| 344,17 | Evaluator | |
P/S | Date | |
| 244 10 | Evaluator | | - 1/5
P/S | Date | |
| 544.10 | Evaluator | <u></u> | F73 | Date | . <u></u> |
| 344.19 | Evaluator | | P/S | Date | , |
| 344.20 | Evaluator | | P | Date | |
| 344.21 | Evaluator | | P | Date | |
| 344.22 | Evaluator | | P/S | | <u></u> |
| | Εναιματογ | | | Date | |

UNIT 2 OPS/21

SRO/STA OJT Manual -100 January 1990

n no star star Nate λαι ζετα

· · · · rennan na ben na ar an an ar fir-firtr⊂ anj ² 4 - - - na n sa is anna ∵is e d . . . • -an a shi nakan a pertende ¹⁰ s ÷ 4.8 ± 14+ +4 kiandikaan ⊒Encidian. Canadi likanaan : y h_f y ¥ 1 B.A -41 B 1. 1. F. bela kirke i dedisense t i t t indexe and and and an interior of the second and the second and the second and the second and the second n. n.e. 44 - 4 a sign it ance-watenesses wordwit b - -• # National Communication of the State of State ~ . ngan antananin kur a antar a an ang ng ng A ę ¢ - 1999; - 18 x - 8 x 10 -**

۰ <u>-</u>

• • · · ·

Student's Name

SYSTEM 344 EMERGENCY OPERATIONS 344.23 P/S Date Evaluator 344.24 P/S Date Evaluator Ρ 344.25 Evaluator Ρ 344.26 Evaluator 344.27 Ρ Evaluator 344.28 ρ Evaluator 344.29 ρ Evaluator 344.30 Ρ Evaluator 344.31 P Evaluator 344.32 Ρ Evaluator 344.33 Ρ Evaluator Ρ 344.34 Evaluator 344.35 ·P Evaluator 344.36 Ρ Evaluator 344.37 Ρ Evaluator 344.38 Ρ Evaluator 344.39 Ρ Evaluator 344.40 Ρ Evaluator 344.41 Ρ Evaluator 344.42 .P Evaluator 344.43 Evaluator 344.44 Evaluator

Date .Date Date Date Date

UNIT 2 OPS/21

344.45

SRO/STA OJT Manual

January 1990

-101

Evaluator

49.2 ± ∎latz kanada meli te • •=== **•**== **•**== • 5 tet Fill pentidentati yntri i milet ٤ 1 ar., – 1ar pa a Anna 1114 y r. 1 it tit Maar yn Taap en Hyfranstynskaniaer yn anne 650- 9. 1 Σραια γ ու 1918 18-19-ից արելիցնեն նահամի ՀՀԿատեւնել տարան համեկու 49--Դրում։ ۶i. ·· . a and y i a huite 1. ⊽ 1940 – ∎tit 1. 1919–1955, An ⊥ 1+ 448 % 638°€ t 48 s -- --- -- -1 an 1



• •

| έφ68 μ.Κ. 193 <u>π.</u> μ. μ. π. π. π. α. μ. |
|---|
| |
| |
| 's € ↓ |
| م بو ر د |
| antique - ant fair 💏 a |
| |
| • |
| A, BR Steep |
| aman kana -a a senih na na marani |
| |
| |
| t & ,≧ & → → h |
| ar ar ar ar ar an ann an an ann an an an |
| الله عر
 و⊀ا |
| |
| • • • • • |
| ter av −at mennante, tært akter |
| P 1 |
| |
| · · · · · · · · · · · · · · · · · · · |
| |
| |
| a second to the second s |
| and a statement to the state of several st |
| |
| a |
| مېگە ئە ⊭ە، ئۇرىشە |
| در به هدی میروند در در میروند میروند.
ا |
| *(|
| 1 Se |
| Fa shasanan a j |
| -ana alamananan ang - 1940 a at |
| F + |
| ÷ |
| ts fm. F maar6 mA |
| ಷಿಕೆ ಕೆಕ್ಸ್ ಕೆ. ಕೆ.ಕೆ.ಕೆ.ಕೆ.ಕೆ.ಕೆ.ಕೆ.ಕೆ.ಕೆ.ಕೆ.ಕೆ.ಕೆ.ಕೆ.ಕ |
| 4- A |
| 67 ° • |
| 43 ° •- • |
| ر ۱۹۶۰ کا
معاد 1980 میں دوران |
| دی ۲۰۰۰ پ
۲۰۰۰ میں میں در ۲۰۰۰ میں میں در ۲۰۰۰
۲۰۰۰ - ۲۰۰۰ میں در ۲۰۰۰ میں د |
| |
| ου του του του του του του του του του τ |
| |
| |
| ου του του του του του του του του του τ |
| |
| |
| 13 τ μ
μ του |
| an the analysis of the second |
| Constraints of the second seco |
| |
| C2 * τ |
| Call P = y So a set of a set |
| |
| |
| |
| (2) (1) (1) (2) (1) (1) (2) (1) (2) (1) (3) (1) (4) (1)< |
| 13 ° • • • • • • • • • • • • • • • • • • |
| |
| (3) * μ - μ (4) * μ - μ (4) * μ (4) * μ (4) * μ (5) * μ (5) * μ (5) * μ (5) * μ (6) * μ (7) * |
| |
| |
| 1/3 * p - p
 |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |

]______ _____

.

"¥ ¥

150

,

Student's Name

.

| | | SYSTEM 344 | EMERGENCY OPERATIONS |
|----|---------|------------------|--|
| | 344,46 | • | P |
| | 244 47 | Evaluator | |
| | 344.4/ | Evaluator | ······································ |
| °i | 344.48 | Evaluator | р |
| | 344.49 | Fueluetor | D |
| : | 344.50 | | P/S |
| | 344.51 | Evaluator | P |
| | 244 52 | Evaluator | <u>р</u> |
| | 344.52 | Evaluator | · · · · · · · · · · · · · · · · · · · |
| | 344.53 | Evaluator | ······································ |
| | 344.54 | Evaluator | P |
| | 344.55 | | Р |
| | 344.56 | Evaluator | P |
| | 344, 57 | Evaluator | P |
| | 244 50 | Evaluator | ι, _κ :
Ο |
| | 344.58 | Evaluator | |
| | 344.59 | Evaluator | р |
| | 344.60 | <u> </u> | Ρ |
| | 344.61 | | р |
| | 344.62 | Evaluator | р |
| | 344.63 | Evaluator | р |
| | 244 64 | Evaluator | |
| | 344.04 | Evaluator | . та ^л айн та хан а х |
| | 344.65 | Evaluator | <u>р</u> |
| | 344.66 | Evaluator | P. |
| | 344.67 | | P |
| | | Evaluator | , - · |

. . *

| | ત્ર ધ્ય |
|-------|------------|
| | Date |
| | Date |
| | - Date |
| | , Date |
| | Date |
| | Date . |
| | Date |
| • | Date |
| | Date |
| • | Date. |
| | Date |
| | Date . |
| | Date |
| | Date |
| • | Date |
| | Date |
| | Date |
| | Date |
| | |
| | Uate |
| * 101 | |
| | ""Uale" "" |

SRO/STA OJT Manual -102 January 1990

مستنبية بين بالمستنبية المستنبة المستنبة المستنبة المستنبة المستنبة المستنبة المستنبة المستنبة المستنبة الم

a and a second s

.

· · ·

، ہے یہ ر . نو

- 長裕時の代表に近し、「時間」 - 一てき ひとまた入作者



SRO/STA OJT Manual -103 January 1990

•

• • • • • • • • • • •

.

,

.,

• •