

SENIOR REACTOR OPERATOR REPLACEMENT TRAINING PROGRAM DESCRIPTION

TMI-1

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RECORD OF CHANGES

[illegible]

TMI-1 SENIOR REACTOR OPERATOR REPLACEMENT TRAINING PROGRAM

1 PURPOSE

The purpose of the Senior Reactor Operator Replacement Training Program is to prepare licensed reactor operators to perform senior reactor operator duties, improve skills in situation and problem assessment, and develop supervisory abilities.

2 REFERENCES

Senior Operator	ANS 3.1, Draft Rev. 10/80
	10CFR50, Draft Rev. 5/14/80
	10CFR55, Draft Rev. 5/14/80
	R.G. 1.8, Draft Rev. 9/80

3 DEFINITIONS

1. Candidate - An individual designated by the Manager of Operations as a potential Senior Reactor Operator.
2. Extra person - A candidate assigned to an operating shift for on the-job training whose presence is not required to perform specific, non-training - related tasks.
3. Designated Task Examiner - That individual(s) assigned by the Shift Supervisor in writing as being authorized to conduct a checkout on a specific OJT task and to certify by his signature on the OJT sheet that the task has been satisfactorily completed. The task examiner may be any individual assigned to that particular shift who the Shift Supervisor determines through experience or personal knowledge possesses requisite knowledge of the task to properly conduct the checkout.
4. Instructor - An SRO licensed member of the Operator Training Section of the Training Department or a "guest" instructor whose ex-

pertise in a specific subject area, e.g., a systems engineer, has resulted in his assignment, approved in writing by the Operator Training Manager or Manager Plant Training to present material on that subject area. With the exception of guest lecturers, senior licensed or certified instructors must teach systems, integrated responses and transient behavior to licensed operators.

4. PROGRAM DESCRIPTION

4.1 Prerequisites

All candidates for Senior Reactor Operator shall:

1. Have a high school diploma or equivalency.
2. Meet (or will meet prior to SRO License application) current Regulatory Guide 1.8 requirement: (if any) for minimum number of semester hours of college level education in designated technical subjects.
3. Meet the following experience requirements:
 - a. Have four years of responsible power plant experience. Responsible power plant experience should be that obtained as a control room operator (fossil or nuclear) or as a power plant staff engineer involved in the day-to-day activities of the facility. A maximum of two years power plant experience may be fulfilled by academic or related technical training, on a one-for-one time basis. Two years shall be nuclear power plant experience;
 - b. Three months of performing the duties of a Senior Reactor Operator while under instruction as an extra person in the control room ; and
 - c. Have at least one year of experience as a licensed

operator at TMI-1; or

- d. At least an RO license or equivalent military experience at some other plant and at least six months in Unit-1 followed by a mock exam to determine capability of completing a Unit 1 SRO replacement program prior to entering the program; or
 - e. Possess a degree in engineering or applicable sciences.
4. Satisfactorily meet the minimum medical requirements for licensed personnel as specified in 10CFR55.

4.2 Sequence (See Appendix B)

Decision Analysis/Supervisory Development - 2 weeks

Phase 1 OJT - 6 weeks

Classroom Training - 8 weeks

Phase 2 OJT - 6 weeks

Simulator Training - 2 weeks, including NRC Simulator

Audit Exam (when implemented)

4.3 Program Objectives

1. Conduct training in the subjects listed below to enable the trainee to demonstrate through written and oral examinations, completion of specified practical factors, and completion of an operating examination, the ability to direct the activities of licensed reactor operators safely and competently and to obtain an NRC Senior Reactor Operator license:
 - A. Supervisory course in decision analysis/Supervisory development
 - B. Supervisory control room and plant operating experience, directed by specific task assignments

and licensed senior operators

- C. Reactor Theory
 - D. Plant design and operating characteristics
 - E. Plant control systems
 - F. Radiation Control and Safety
 - G. Fluid flow, thermodynamics and heat transfer
 - H. Plant transients
 - I. Recognizing and mitigating core damage
 - J. Simulator training
2. Certify the competency of applicants to direct the operation of the plant safely and efficiently by satisfactory achievement of specified learning objectives, which are administratively documented.

4.4 Outline

1. On-The-Job Training

- A. Secondary Systems
- B. Primary Systems
- C. Administrative Procedures
- D. Normal, Abnormal and Emergency Operating Procedures
- E. Technical Specifications

2. Classroom Training

The primary purpose of the classroom training is to integrate previous system knowledge with overall plant operation and operating procedures.

A. Reactor Theory Review

Neutrons and Neutron Interactions

Solving Exponential Equations
Multiplication Factors
Reactor Kinetics
Reactivity
Subcritical Multiplication
Neutron Sources
Reactor Period and Start Up Rate
Problem Solving in Reactor Kinetics
Reactivity Coefficients
Flux Distribution
DNB, F_Q , $F_{\Delta H}$
Reactor Control
Fuel Assemblies and Control Rods
Transients and Effects on Fuel Assemblies and
Control Rod
Fission Product Poisons
Reactor Transient Analysis
Excore Nuclear Instruments
Fission Product Gasses and Fission Products
B. Heat Transfer and Fluid Flow, Thermodynamics
Heat Transfer
Properties of Fluids

Steam Tables

Core and Plant Parameters, Normal and Transient

C. General Categories

Facility Incidents

Emergency Plan

Security

Technical Specifications

Administrative Procedures

Emergency, Abnormal and Normal Operating Procedures, including Abnormal Transient Operating Guidelines

Primary & Secondary Chemistry Review

Recognition and Mitigation of Consequences of Severe Core Damage

Change Modifications

D. Radiation Control and Safety

Radioactivity and Radiation

Effects of Radiation

Radiation Exposure Limits

Radiation Protection Problems

Radiation Instruments

E. Reactor Control

RCS Instrument Failures

Integrated Control System (ICS)

ICS Transients

4.5 Administration

A. Program Presentation

1. On-The-Job Training

- a. The On-The-Job Training Program consists of two phases of preselected tasks which involve observation and participation by the Senior Reactor Operator (SRO) License candidate in job related activities designed to reinforce classroom study, maximize new learning experiences, and stimulate interest. Phase I is to be completed during an initial 6 week period and Phase II during a second 6 week period.
- b. Primary verification of OJT tasks shall be by oral checkout of the SRO license candidate on individual task items by a task examiner, designated in writing by the Shift Supervisor using the form in Appendix D. Shift Foreman and Supervisors may sign-off any individual task.
- c. Final verification shall be by oral and written checkout of task sheet sections by the Shift Supervisor (or Shift Foreman as designated in writing by the Shift Supervisor, using the form in Appendix D.)

- d. During Phase I the license candidates shall be assigned to various shifts. During this phase, the candidate shall review and take logs on the support, secondary and primary plant systems and tasks involved in their operation as sequenced in Appendix B. The logs shall be taken daily and submitted to the Operator Training Section at the end of each week. During Phase II of the on shift assignments, the SRO candidate shall be assigned by the Manager of Operations to the specific shift for which the SRO license is to be used, if applicable. During this phase, the candidate shall complete the task sheets from Appendix A.

2. Classroom Training

- a. The classroom training shall be 8 weeks in duration, with lectures presented by qualified instructors using approved lesson plans. All portions of classroom training requiring self study shall be monitored by a qualified instructor who shall be available for individual consultation.
- b. The SRO license candidate will be responsible for all material presented. If a candidate misses more than one consecutive week, the Supervisor, Licensed Operator Training will review the situation to determine if the candidate will be able to catch up with his class, and make a recommendation to the Operator Training Manager and the Manager of Operations regarding continuation in the program.

3. Simulator

A two (2) week Simulator Program will be utilized to reinforce classroom and OJT concepts and to develop an understanding of integrated plant response. In the event of an excessively large class, the SRO license candidates will be divided into groups of suitable size for simulator operations, with rotation to plant operations as required.

4. Audits

Upon completion of the program there will be two weeks designated for audit exams, self-study, and any remedial training found necessary by the audit exam results.

B. Evaluation Criteria

1. On-The-Job Training

- a. Comprehensive oral checkouts shall be administered by the task examiners for specific task sign-offs and documented by the examiner's signature.
- b. The ultimate responsibility for determining adequate achievement by the student rests with the Shift Supervisor who shall evaluate the performance of the SRO license candidate by final oral check out and/or written questioning on each task sheet, using the Oral Examination Summary Sheet in Appendix D, which shall be retained in the candidate's permanent training file.
- c. All tasks which cannot be performed are to be simulated. Performance or simulation of a task shall not alone constitute successful completion of the task. Discussion and oral questioning by the de-

signated task and final examiners must be included to substantiate successful completion of the task.

d. Individuals failing to achieve a "pass" grade on "Final Verification" checkouts shall be:

- Informed of their weak areas and given direction on the material that they should study to upgrade their performance.
- Re-examined within two weeks of the initial failure.

If an individual fails the second section check-out the Manager of Operations and the Operator Training Manager shall review the SRO license candidates's overall progress and performance and determine the corrective action to be taken.

2. Written Examinations

Written examinations shall be administered by Instructors from the Operator Training Section on a weekly basis during the classroom phase, and at the conclusion of each 6 week OJT phase.

Questions shall cover that material presented in the classroom, specified for self study, and identified on the task sheets.

A passing grade of 80% is mandatory for all written examinations. A grade of less than 80% will require candidate counselling by the instructor administering the exam informing the candidate of weak areas and suggested corrective actions that will upgrade the

individual's performance. A re-exam will be administered within two weeks. If an individual fails the second exam the Supervisor of Operations and the Supervisor of Operator Training will evaluate the SRO license candidate's performance and decide on the corrective action to be taken.

3. Final Examination

A comprehensive written and oral examination shall be administered by the Training Department at the conclusion of the training program. An 80% overall average and a 70% on individual sections is required for the satisfactory completion of the written phase. The oral examination should normally consist of two phases; a "walk through" phase, administered by an Instructor designated by the Supervisor, Licensed Operator Training, and a "board" composed of Instructors designated by the Supervisor, Licensed Operator Training, and the Manager of Operations or his designated representative. A "pass" grade is required for the oral exam substantiated by documentation with Oral Examination Summary Sheets in Appendix D.

Upon completion of these exams, the SRO license candidate's training files and Training Department recommendations shall be forwarded to the Director of Unit 1 who shall approve the candidates for NRC examination, or, in the case of unsatisfactory completion of the program, decide on the corrective action to be taken.

4.6 Responsibilities

A. The Shift Supervisor is responsible for the following:

- Assignment of individuals as designated task examiners.
(A copy of this assignment list shall be forwarded to the Supervisor, Licensed Operator Training).
- Designation of his shift foreman as the OJT final examiner (if applicable).
- Verifying an adequate level of achievement and progress by the license candidates on the OJT phase of the program.

B. Supervisor, Licensed Operator Training is responsible for the following:

- General supervision of the development and conduct of the Replacement SRO Training Program.
- Approval of the development, coordination, scheduling and administration of the Replacement SRO Training Program, including course outlines, lesson plans, student handouts, simulator training, and evaluation exams.
- Scheduling classes, students, classroom and facilities necessary to conduct the training program.
- Interfacing with Operations Department in all matters impacting the training programs.
- Assuring that the program content is updated and revised to meet current requirements and supervising revision of the program content, descriptions, lesson plans, test, and exams.
- Evaluation of course instruction and license candidate progress to determine the effectiveness of the training program and reporting these evaluations to the

Operator Training Manager

- Maintaining the necessary records and reports of training.
 - Developing and conducting oral exams.
 - Evaluation of candidate critiques of the training received.
- C. The Operator Training Manager is responsible for the following:
- Assuring the quality of the Replacement SRO Training Program by written approval of materials including course outline, lesson plans, student handouts, simulator training, quizzes and exams and their compatibility with the Replacement SRO Training Program.
 - Auditing completion of qualification records and reporting results to the Manager, Plant Training, and the Operations Maintenance Director, TMI-1.

4.7 Records and Reports

1. A Training Program Administrative form shall be completed and submitted to the Administrative Section for each classroom lecture or lesson by the instructor who presented the material.
2. Current and past schedules, lesson plans, student handouts, completed OJT task sheets, exam keys and completed exams and quizzes both written and oral, as well as any additional pertinent qualification records shall be maintained on file in the Training Department.
3. A copy of the Candidate Progress Report from Appendix D shall be initiated on each candidate and updated as follows:

- a. Following each weekly quiz during the classroom phase.
- b. Following each 6 week phase of the OJT portion of the program.
- c. Following the completion of simulator training.
- d. Following the final examination.

The Candidate Progress Report shall be maintained at the training center. Copies of the updated report shall be submitted by the Supervisor, Licensed Operator Training to the Manager, Plant Training and Manager of Operations via the Operator Training Manager at the completion of the classroom and OJT phases or more frequently on a case-by-case basis if requested by any of the reviewing individuals.

4.8 Evaluation

1. At the conclusion of each of the three phases of training the license candidates will be asked to complete a training critique form to assist in program evaluation. The completed critiques shall be reviewed by the Supervisor, Licensed Operator Training and forwarded, along with recommendations or corrective action taken to the Manager, Plant Training, via the Operator Training Manager.
2. The Replacement SRU Training Program and its contents shall be reviewed and updated at the end of each program presentation by the instructors presenting the course and the Group Supervisor, Licensed Operator Training. He shall report the results of this review, along with recommendations or corrective action taken to the Manager, Plant Training via the Operator Training Manager. During the presentation of the course no

changes in course content shall be made without prior approval of the Operator Training Manager.

3. Annually an internal team will be formed by the Supervisor, Licensed Operator Training to review the Replacement SRO Training Program. The review team will consist of Instructors from the Operator Training Section.

The team will assess the adequacy of the program for:

- Meeting new requirements
- Adequacy of records
- Quality of material and presentations
- Effectiveness

In conducting the review, the team may use any records maintained by the Training or Operations Departments to assist them. These may include:

- NRC Inspections
- QA Audits
- Other Audits
- Regulatory Changes
- Industry Experience
- License Candidate Critiques

The review team shall report the results to the Manager, Plant Training and the Manager of Operations via the Supervisor, Licensed Operator Training and the Operator Training Manager.

4.9 Changes and Lesson Plan Corrections

The program shall be maintained to reflect the following:

- Changes in regulatory requirements
- Changes in applicable codes, standards and guides
- Significant experiences at the facility
- Significant experience throughout the industry
- Remedial action recommended by review/audit findings.
- Regularly scheduled participant critiques.

Changes will be incorporated per TD 1101 "Training Department Procedures Development/Revision Guide".

4.10 Program Scheduling

The program will normally be scheduled on an annual basis to follow the applicable sections of the Replacement Licensed Operator Program.

4.11 Program Approval

- The Director of Unit 1 through the Operations and Maintenance Director and Manager of Operations, certifies the candidate's readiness for the licensing examination. The Manager of Operations retains the responsibility to ensure that the overall level of training of plant operators is satisfactory through the approval of program content, schedules, and administrative procedures.
- The Manager, Plant Training through the Operator Training Manager, is responsible to ensure that the training program is developed to meet the requirements established by the Director of Unit 1, through the Manager of Operations, and that proper records and documentation are provided and maintained.

- Lesson plans for implementation of the training program will be reviewed by the Supervisor, Licensed Operator Training, and approved by the Operator Training Manager.

APPENDIX A
ON-THE-JOB TRAINING CHECKLISTS

On these sheets are lists of Administrative, Emergency and Abnormal Procedures which must be read, discussed and walked through on shift.

Approximately 8 of these procedures must be addressed each week to maintain an adequate rate of progression through all of the items listed.

NAME:

DATE STARTED:

	Date	Designated Task Examiner Signature
0 Read and discuss the following Administrative Procedures:		
01. Document Control 1001	1.	
02. Tagging 1002	2.	
03. Radiation Protection Manual 1003	3.	
04. Station Organization and Chain of Command 1009	4.	
05. Technical Specifications Surveillance Program 1010	5.	
06. Shift Relief and Log Entries 1012	6.	
07. Bypass and Safety Functions and Jumper Control 1013	7.	
08. Operator at the Controls 1028	8.	

Final Verification _____

NAME / DATE

NAME:

DATE STARTED:

	Date	Designated Task Examiner Signature
0 Walk through and discuss all Emergency & Abnormal Procedures:		
01. Unanticipated Criticality 1203-10	1.	
02. Steam Supply System Rupture 1203-23	2.	
03. OTSG Tube Rupture 1202-5	3.	
04. Loss of Intermediate Cooling 1202-17	4.	
05. Inadequate Core Cooling 1202-39	5.	
a. Find all indications mentioned		
b. Locate all items used to verify that automatic actions have occurred.		
c. Locate all controls necessary to perform all immediate manual and subsequent actions.		
d. Insure you can walk through all Emergency and Abnormal Procedures and note indicators, check automatic actions, and simulate performing manual actions <u>from memory</u> .		

Final Verification

NAME / DATE

NAME:

DATE STARTED:

	Date	Designated Task Examiner Signature
Walk through and discuss all Emergency and Abnormal Procedures:		
01. Loss of Instrument Air 1202-36	1.	
02.Cooldown Outside the Control Room 1202-37	2.	
03. Inadvertent Closure of Main Steam Isolation Valve 1202-42	3.	
04. High Activity in Reactor Coolant 1202-11	4.	
05. Excessive Radiation Levels 1202-12	5.	
a. Find all indications mentioned		
b. Locate all items used to verify that automatic actions have occurred.		
c. Locate all controls necessary to perform all immediate manual and subsequent actions.		
d. Insure you can walk through all Emergency and Abnormal Procedure and note indicators, check automatic actions, and simulate performing manual actions <u>from memory</u>		

Final Verification

NAME / DATE

NAME: _____

DATE STARTED: _____

	Date	Designated Task Examiner Signature
Walk through and discuss all Emergency and Abnormal Procedures:		
01. Plant Response to Penetration of Protected Area 1202-13	1.	
02. Blackout 1202-2	2.	
03. Blackout 1202-2A	3.	
04. Fire 1202-31	4.	
05. Flood 1202-32	5.	
06. Earthquake 1202-30	6.	
07. Low System (grid) Voltage 1203-41	7.	
a. Find all indications mentioned		
b. Locate all items used to verify that automatic actions have occurred.		
c. Locate all controls necessary to perform all immediate manual and subsequent actions.		
d. Insure you can walk through all emergency and abnormal procedures and note indicators, check automatic actions, and simulate performing manual actions <u>from memory</u> .		

Final Verification _____

NAME/ DATE

NAME:

DATE STARTED:

	Date	Designated Task Examiner Signature
Walk through and discuss all Emergency and Abnormal Procedures:		
01. Reactor Trip 1202-4	1.	
02. Turbine Trip 1202-3	2.	
03. Loss of RC flow/RCP trip 1202-14	3.	
04. Loss of Reactor Coolant Makeup 1203-15	4.	
05. CRD Equipment Failures 1202-8	5.	
a. Find all indications mentioned.		
b. Locate all items used to verify that automatic actions have occurred.		
c. Locate all controls necessary to perform all immediate manual and subsequent actions.		
d. Insure you can walk through all emergency and abnormal procedures and note indicators, check automatic actions, and simulate performing manual actions <u>from memory</u> .		

Final Verification

NAME/ DATE

NAME:

DATE STARTED:

	Date	Designated Task Examiner Signature
0. Walk through and discuss all Emergency and Abnormal Procedures:		
01. Loss of RC/RC Pressure 1202-6A	1.	
02. Loss of RC/RC Pressure 1202-6B	2.	
03. Loss of RC/RC Pressure 1202-6C	3.	
04. Pressurizer Failure 1202-29	4.	
05. Loss of Feed to OTSG 1202-26A	5.	
06. Loss of Feed to OTSG 1202-26B	6.	
07. Load Rejection 1203-1	7.	
08. High Cation Conductivity in Condensate 1203-5	8.	
a. Find all indications mentioned.		
b. Locate all items used to verify that automatic actions have occurred.		
c. Locate all controls necessary to perform all immediate manual and subsequent actions.		
d. Insure you can walk through all emergency and abnormal procedures and note indicators, check automatic actions, and simulate performing manual actions <u>from memory</u> .		

Final Verification

NAME / DATE

NAME:

DATE STARTED:

	Date	Designated Task Examiner Signature
Walk through and discuss all Emergency and Abnormal Procedures:		
01. Loss of Decay Heat Removal 1202-35	1.	
02. SSCC System Failure 1203-21	2.	
03. Control Room HVAC 1203-24	3.	
04. Vibration and Loose Parts 1203-40	4.	
05. River Water Failure 1203-19	5.	
06. NSCC System Failure 1203-20	6.	
07. RC Pump & Motor Malfunctions 1203-16	7.	
a. Find all indications mentioned.		
b. Locate all items used to verify that automatic actions have occurred.		
c. Locate all controls necessary to perform all immediate manual and subsequent actions.		
4. Insure you can walk through all Emergency and Abnormal Procedures and note indicators, check automatic actions, and simulate performing manual actions <u>from memory</u> .		

Final Verification

NAME / DATE

APPENDIX B - PROGRAM SEQUENCE

ON SHIFT

CLASSROOM

Secondary Plant

Secondary Plant

Outbuildings

IWTS, IWFS

Decision Analysis Training

1 Take Log Readings Daily

2

3

4



REQUAL

Primary Plant

Primary Plant

5 Take Log Readings Daily

6



1

Reactor Theory

2

Thermodynamics, HT, Fluids

3

ICS Transients, Accident Analysis

4

Core Construction, Charact., F.H. Chapt. 14, TMI-2, S.B., LOCA

5

Accident Mitigation, Rad Prot., Limits, 10CFR's, AP 1044

REQUAL

6

WDG, RB Purge, WDL Rel's, RWP, E-Plan, X/Q

7

L's & P's, Setpts, T.S.'s, LFR's, ESAS, RPS, Security

8

Intlk Rev., ETS, Big OP's, Seismic, Meteorology, Elec. Theory & Safety, S & T

On Assigned Shift

1 Complete OJT Training Checklists (Appendix A)

2

3

4

5

6



Orals, Relief, 7-3, Last Day
Mock Written

Simulator

Simulator

WRC Exam

GROUP/SHIFT: REPLACEMENT SRO

UNIT: 1

WEEK OF TO

PROGRAM: REPLACEMENT SRO Week 2

0700	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	0700
	THERMODYNAMICS;	---HEAT TRANSFER,	--FLUID PROPERTIESand....	FLOW	
0800						0800
0900						0900
1000						1000
1100						1100
1200						1200
1300					WEEKLY TEST	1300
1400						1400
1500						1500

APPENDIX C
TYPICAL CLASSROOM SCHEDULE

GROUP/SHIFT: REPLACEMENT SRO

UNIT: 1

PROGRAM: Replacement SRO Week 1

WEEK OF _____ TO _____						
		MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
0700		REACTOR THEORY	REACTOR THEORY	REACTOR THEORY	REACTOR THEORY	REACTOR THEORY
0800						
0900						
1000						
1100						
1200						
1300						
1400						WEEKLY TEST
1500						

GROUP/SHIFT: REPLACEMENT SRO

UNIT: 1

WEEK OF TO

PROGRAM: REPLACEMENT SRO Week 3

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	
0700	ICS TRANSIENTS	ICS TRANSIENTS	ICS TRANSIENTS	ACCIDENT ANALYSIS	ACCIDENT ANALYSIS	0700
0800						0800
0900						0900
1000						1000
1100	ICS TRANSIENTS	ICS TRANSIENTS	ICS TRANSIENTS	ACCIDENT ANALYSIS	ACCIDENT ANALYSIS	1100
1200						1200
1300						1300
1400					WEEKLY TEST	1400
1500						1500

GROUP/SHIFT: REPLACEMENT SRO

UNIT: 1

WEEK OF TO

PROGRAM: REPLACEMENT SRO Week 4

C.4

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	
0700						0700
0800	REACTOR CORE CONSTRUCTION AND CHARACTERISTICS	FUEL HANDLING SYSTEM AND REQUIREMENTS	FSAR CHAPT. 14 SAFETY ANALYSIS	FSAR CHAPT. 14 SAFETY ANALYSIS	TMI-2 TRANSIENT and SMALL BREAK LOCA GUIDELINES	0800
0900						0900
1000						1000
1100						1100
1200						1200
1300					WEEKLY TEST	1300
1400						1400
1500						1500

GROUP/SHIFT: REPLACEMENT SRO

UNIT: 1

WEEK OF TO

PROGRAM: REPLACEMENT SRO Week 5

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	
0700	ACCIDENT MITIGATION	RADIOACTIVE DECAY	10 CFR 20	10 CFR 50	10 CFR 21	0700
0800						0800
0900						0900
1000		SHIELDING			AP 1044	1000
1100						1100
1200		DOSE RATE CALCULATIONS	10 CFR 100	10 CFR 55	WEEKLY TEST	1200
1300						1300
1400						1400
1500						1500

GROUP/SHIFT: REPLACEMENT SRO

UNIT: 1

WEEK OF _____ TO _____

PROGRAM: REPLACEMENT SRO WEEK 6

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	
0700						0700
	GAS TANK RELEASE	LIQUID RELEASE CALCS/PAPERWORK	E-PLAN	E-PLAN	X/Q CALCULATIONS	
0800	PAPER WORK/CALCS					0800
0900						0900
1000						1000
1100	RB PURGE PAPERWORK/CALCS	RWP PROCEDURES			WEEKLY TEST	1100
1200						1200
1300						1300
1400						1400
1500						1500

GROUP/SHIFT: REPLACEMENT SRO

UNIT: 1

WEEK OF TO

PROGRAM: REPLACEMENT SRO WEEK 7

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	
0700						0700
	PLANT LIMITS and	TECH SPEC/BASIS REVIEW	TECH SPEC/BASIS REVIEW	TECH SPEC/BASIS REVIEW	RPS INSTRUMENTA- TION	
0800	PRECAUTIONS REVIEW				REDUNDANCY and LOGICS	0800
0900						0900
1000						1000
1100	PLANT SETPOINTS REVIEW		PRIMARY SECONDARY CHEMISTRY REVIEW	ESAS INSTRUMENTATION REDUNDANCY and LOGICS	SECURITY (SP 1005.9)	1100
1200						1200
1300					WEEKLY TEST	1300
1400						1400
1500						1500

GROUP/SHIFT: REPLACEMENT SRO

UNIT: 1

REPLACEMENT SRO Week 8

PROGRAM:

WEEK OF _____ TO _____		MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
0700						0700
0800	MAJOR PLANT INTERLOCKS REVIEW	PLANT HEATUP OP.	POWER OPS OP	SEISMIC MONITORING SYSTEM	SWITCHING and TAGGING	0800
0900						0900
1000			PLANT S/D OP	METEOROLOGY INSTRUMENTATION	CHANGE MODS	1000
1100						1100
1200	ENVIRONMENTAL TECH SPECS	PLANT S/U OP.	PLANT C/D OP	ELECTRICAL THEORY REVIEW AND SAFETY	WEEKLY TEST	1200
1300						1300
1400						1400
1500						1500

1. CANDIDATE PROGRESS REPORT -

(NAME) _____

1. CLASSROOM PHASE

QUIZ #	GRADE
1	
2	
3	
4	
5	
6	
7	
8	

2. OJT PHASE 1

Week	Log Readings Submitted (Yes/No)	
1 & 2 (Secondary)		
3 (Out- Buildings)		
4 (IWTS, IWFS)		
5 & 6 (Primary)		

3. OJT PHASE 2

Week	Required Signatures New/Total	Actual Signatures New/Total
3	24/24	
6	21/45	

OJT COMPLETED

_____/_____
(Date)_____
Supervisor,
Licensed Operator Training

4. Simulator Training completed

Date _____

Pass/Fail_____
Supervisor, Licensed Operator Training

5. Final Examination

Written _____
Grade/DateOral Pass/Fail/_____
(Date)

Oral Board Members: _____

Submitted _____
Supervisor, Licensed Op. Trng.

Reviewed

Up. Trng. Mgr./Mgr. Plt. Trng./Mgr. of Ops.

2. Oral Examination Summary Sheet

Purpose: (Check One)

Candidate's Name

() OJT Section Final Verification

Examiner

() Final Examination

() Other

Date

Grade (Pass/Fail)

Summary of questions asked

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Weak Areas Noted:

Overall Evaluation (Pass/Fail)

Further Action Required (If none, so state)

Signature of Examiner

Reviewed By

Supervisor, Licensed Operator
Training

3. Designation of Task Examiners

Date _____

The below listed individuals are hereby designated as Task Examiners for the OJT phases of the Replacement SRO Training Program for Shift _____
(Letter)

TASK	NAME	TASK	NAME	TASK	NAME
1.01		4.01		6.06	
1.02		4.02		6.07	
1.03		4.03		6.08	
1.04		4.04		7.01	
1.05		4.05		7.02	
1.06		4.06		7.03	
1.07		4.07		7.04	
1.08		5.01		7.05	
2.01		5.02		7.06	
2.02		5.03		7.07	
2.03		5.04			
2.04		5.05			
2.05		6.01			
3.01		6.02			
3.02		6.03			
3.03		6.04			
3.04		6.05			
3.05					

Shift Supervisor

cc: Operator Training Section

4. Designation of Foreman as Final OJT Examiner

Date _____

To: _____
Foreman

You are hereby designated to serve as the final verification examiner for the OJT sections noted below:

(List Sections)

for replacement SRO's on shift _____
(letter)

Shift _____ Shift Supervisor

cc: Operator Training Section