LETTER AGREEMENT NO. R3-97-58-PGE

IBEW

PACIFIC GAS AND ELECTRIC COMPANY
INDUSTRIAL RELATIONS DEPARTMENT
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INTERNATIONAL BROTHERHOOD OF
ELECTRICAL WORKERS, AFL-CIO
LOCAL UNION 1245, I.B.E.W
P.O. BOX 4790
WALNUT CREEK, CALIFORNIA 94596
(510) 933-6060

MEL BRADLEY, MANAGER OR
DAVID J. BERGMAN, CHIEF NEGOTIATOR

JACK MCNALLY, BUSINESS MANAGER

September 4, 1997

Local Union No. 1245
International Brotherhood of
Electrical Workers, AFL-CIO
P. O. Box 4790
Walnut Creek, CA 94598

Attention: Mr. Jack McNally, Business Manager

Gentlemen:

The parties have had many discussions over the years concerning Operator training programs, selection, and premiums at the Diablo Canyon Power Plant. In joint meeting on August 4, 1997, Company representatives Joe DeMartini, Senior Industrial Relations Representative, James Molden, Manager - Operations, and Union representatives Darrel Mitchell, Senior Assistant Business Manager, Mike Haentjens, Business Representative, Mike Jacobson, Senior Control Operator, Jeff Knisley, Senior Control Operator, and Warren Brown, Nuclear Operator, agreed to recommend the following proposals be adopted.

Nuclear License Premiums

1. A Senior Control Operator or Control Operator with a Reactor Operator License will receive an hourly premium equal to 2.0 x the 3rd Shift Premium.

2. A Senior Control Operator or Control Operator with a Senior Reactor Operator License will receive an hourly premium equal to 2.6 x the 3rd Shift Premium.

3. A Nuclear Operator with a Reactor Operator License will receive an hourly premium equal to 1.6 x the 3rd Shift Premium.

Oversight Committee

An Oversight Committee comprised of two management representatives selected by Company and two bargaining unit representatives selected by Union will be established. The committee will have responsibilities as outlined in this agreement.

Licensed Training

1. Company shall select Senior Control Operators or Control Operators to attend training to qualify for the NRC Senior Reactor Operator examination; Company shall take into consideration length of time in the classification.

2. Company agrees to maintain SRO licenses for at least 75 percent of the employees (or no less than 12 employees, whichever is higher) whose base classification is Senior Control Operator. To accomplish this, Company agrees to schedule at least two Senior Control Operators to each regularly scheduled license class.

3. Non bargaining unit employees may assume hands on watch station responsibilities to qualify for, and maintain, an NRC license. Such use of non-bargaining unit employees shall not be for the purpose of dispensing with the services of the appropriate bargaining unit classification.

4. Company shall continue to determine the number of RO licenses to maintain. Selection for the RO license class will be in order of Company service from Nuclear Operators who have a valid prebid on file to Control Operator. To be considered eligible to attend an RO license class, a Nuclear Operator must have maintained an average score of 85% on the first attempts of the weekly non-licensed operator tests taken in the year period preceding the start of license class.

5. The provisions of Administrative Procedure No. TQ2.DC2, Rev.2 (copy attached), will be adopted and made part of this agreement. An employee who fails a weekly test, a phase exam, the Company audit exam, or a NRC license exam will be offered remediation and allowed one retest of each of the required examinations. The remediation program for the Company audit exam and the NRC license exam must receive the approval of the Oversight Committee. An employee who fails a retest will not receive additional training or testing opportunities without the mutual consent of both the Company and the Union.

6. An employee who voluntarily removes himself or herself from training will be allowed one additional opportunity to participate in the training program at the next available class.

7. Revisions to Administrative Procedure No. TQ2.DC2, Rev. 2, will require the approval of the Oversight Committee.

Non-Licensed Training Program

1. The provisions of Administrative Procedure TQ2.DC3, Rev. 5 (copy attached), will be adopted and made part of this agreement. An employee whose training is extended due to a failure on a weekly test will not be entitled to overtime penalties that are associated with a change of hours to accommodate day shift training.

Non-Licensed Training Program (Continued)

2. Revisions to TQ2.DC3 require the approval of the Oversight Committee. Further, the Oversight Committee may review, upon request, the current exam bank and weekly examinations to ensure the exams are appropriately measuring performance.

Wages

1. The 54 month wage step of 1699 Nuclear Operator will become effective August 4, 1997, as follows:

1997 - 1099.45
1998 - 1135.20
1999 - 1174.95

2. The beginning pay step of 1583 Control Operator will be eliminated.

If agreed to, the appropriate revisions will be made to Exhibit VI-B, Title 600, Job Definitions and Lines of Progression - Steam Generation Department and Nuclear Power Generation Department.

Effective Date

The effective date of this proposal will be the first of the month following agreement between the parties.

If you are in accord with the foregoing and agree thereto, please so indicate in the space provided and return one executed copy of this letter to the Company.

Very truly yours,

PACIFIC GAS & ELECTRIC COMPANY

By: _____
Chief Negotiator

The Union is in accord with the foregoing and agrees thereto as of the date hereof.

Sept 26, 1997

By: _____
Business Manager

TITLE: LICENSED OPERATOR AND SHIFT TECHNICAL ADVISOR INITIAL TRAINING PROGRAM

APPROVED: _____ **01/31/97** **02/06/97**
DATE **EFFECTIVE DATE**

SPONSORING ORGANIZATION: NPG LEARNING SERVICES
PROCEDURE CLASSIFICATION: QUALITY RELATED
REVIEW LEVEL: "A"

TABLE OF CONTENTS

TITLE: LICENSED OPERATOR AND SHIFT TECHNICAL ADVISOR INITIAL TRAINING PROGRAM

1. SCOPE

This procedure provides the steps required for conducting each phase of the Licensed Operator and Shift Technical Advisor (STA) initial training program.

2. DISCUSSION

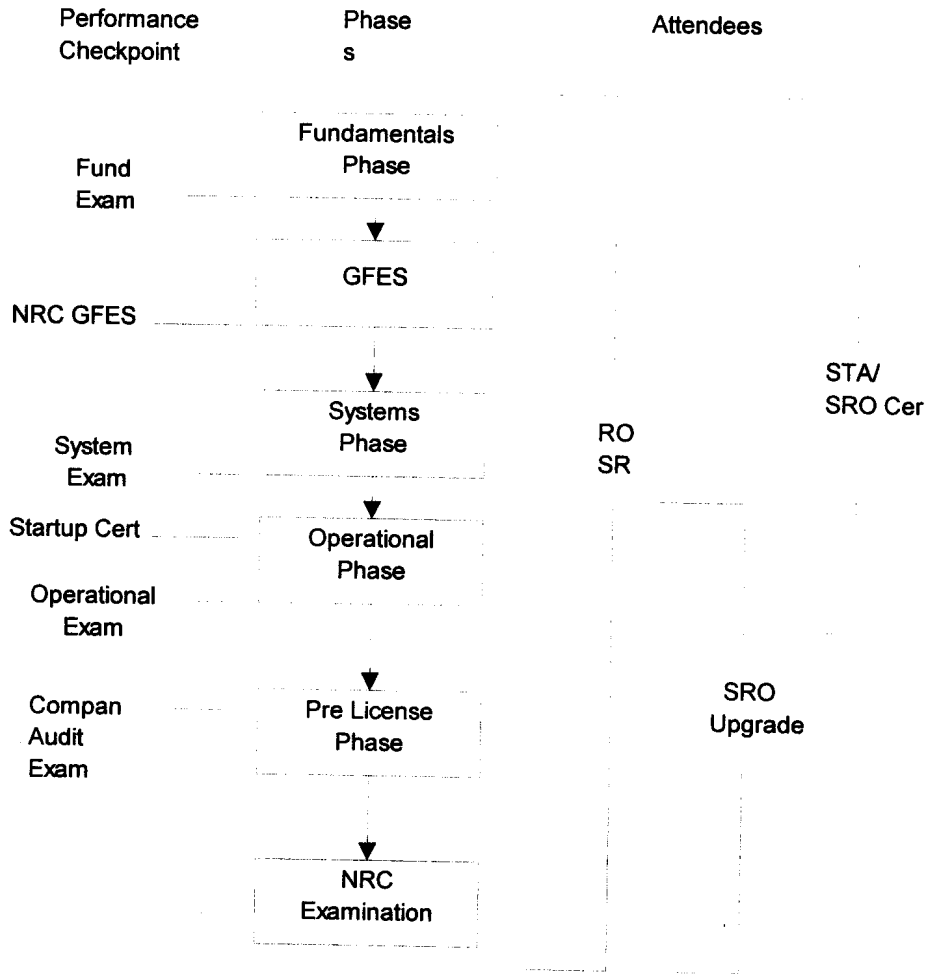
2.1 A summary of the Initial Licensed Operator Program is shown below.

Phase	Attendance Requirement					Description	Approx. Time
	RO	SRO	STA	SROU	SROC		
Fundamentals	X	X	X		X	Provides basis for understanding systems and integrated plant operation	4 months
Systems	X	X	X		X	Provides in-depth training for each major plant system stressing control room operation	3 months
Operational	X	X	X	X	X	Provides in-depth training integrating all aspects of plant operation including procedures, analysis, On-the-Job Training (OJT) and integrated plant operation	8 months
Pre-License Preparation	X	X		X		Provides a final review of all knowledges and abilities required for the licensing process	2 months
NRC Exam	X	X		X		This includes the final license exams conducted by the NRC	1 week

SROC = Senior Reactor Operator Certification

SROU = Senior Reactor Operator Upgrade

2.2 The overall flowpath of the Initial Licensed Operator Training Program is shown below.



3. DEFINITIONS

3.1 **EXAM** - A series of questions, simulator scenarios or JPMs requiring written answers, oral answers, and/or behavioral responses which is administered, generally at the completion of a training course. Exams are more comprehensive than tests.

3.2 **TEST** - A series of questions, simulator scenarios or JPMs requiring written answers, oral answers, and/or behavioral responses which is administered, generally at the end of a topical area of training. Tests are more comprehensive but typically less detailed than quizzes.

3.3 **QUIZ** - A series of questions, simulator scenarios or JPMs requiring written answers, oral answers, and/or behavioral responses which is administered frequently during training. Quizzes are used to verify that student have satisfactory understanding of recently presented material.

3.4 **PERFORMANCE CHECKPOINT** - A series of specific points in the program at which student performance is evaluated, documented and forwarded to line management (refer to program flowpath in Section 2.2).

3.5 **COURSE** - An orderly presentation of lessons and topics and the related measurement and evaluation of student knowledge and/or skills in general areas of training.

3.6 **PHASE** - A section of the course that deals related topic areas, such as fundamentals phase, systems phase etc.

3.7 **LESSON** - Specific subject matter, e.g., covering a task, a system, an area of fundamentals, or procedures.

3.8 **LEARNING OBJECTIVE** - A statement which defines the knowledges and abilities to be gained from an instructional activity.

4. RESPONSIBILITIES

4.1 The responsibilities listed in TQ2.ID4 apply to this procedure.

4.2 **NPG Operations Management**

- Providing personnel entering initial training programs who possess expected entry-level knowledge, skills and experience.
- This shall be done in accordance with Union contract.
- Conducting pre-screening for non-union personnel prior to selection for license training program.
- The Director, Operations is responsible for ensuring independent evaluations of the program are conducted.

5. PREREQUISITES

The following prerequisites are required to enter the training course. See TQ1.ID2 for further details.

5.1 REACTOR OPERATOR (RO)

Should have completed the Non-Licensed Operator Initial Training Program or an equivalent program at a similar facility.

RO License Candidates should have:

- At least 3 years power plant experience
- At least 1 year DCPP experience, inclusive in the 3 years power plant experience
- At least 6 months at DCPP performing operational duties as a Non-Licensed Operator
- A high school diploma or equivalent

5.2 SENIOR REACTOR OPERATOR (SRO)

Previously held an RO license at DCPP OR any one of the following:

- BS Degree in engineering or related physical sciences
- at least 1 year as an active licensed RO at a comparable facility or 18 months as an RO at a noncomparable commercial power reactor.
- at least 2 years in a position equivalent to a licensed RO at a military reactor
- experience obtained in licensed positions on other large-scale reactors will be evaluated on a case-by-case basis. (See NUREG 1021, ES-204)

Other requirements:

- Have at least 4 years power plant experience
- Have at least 2 years nuclear power plant experience, inclusive in the 4 years power plant experience
- Have at least 6 months at DCPP
- Individuals must either participate in or be exempted by challenge exam from the Fundamentals and Systems Phases prior to commencing the Operational Phase. (See exemption form, TQ2.ID6)
- Training Instructors, who hold or have held either an NRC Senior Operator License or Certification, must either participate in or be exempted by challenge exam from the Fundamentals and Systems Phases prior to commencing the Operational Phase. (See exemption form, TQ2.ID6)

5.3 STA Certification

- Should have a minimum of one year nuclear experience
- Should have a minimum of six months "onsite" nuclear experience
- Should have a high school diploma and 60 semester hours of college level education (900 classroom or instructor conducted hours) in mathematics, reactor physics, chemistry, materials, reactor thermodynamics, fluid mechanics, heat transfer, electrical and reactor control theory.

OR

The STA shall have a BS degree in engineering or the physical sciences.

5.4 All candidates

The 'locate' portion of the OJT Qualification cards will be provided to the candidates prior to the commencement of the formal program. This portion should be accomplished as soon as possible, but must be completed by the end of the OJT phase. See OJT Task Performance Evaluation (TPE) Guide in Section 6.5.5.

6. INSTRUCTIONS

6.1 Systematic Approach to Training (SAT) Process

6.1.1 Analysis

a. The analysis phase of SAT for the Initial Licensed Training Program shall be completed in accordance with TQ2.ID1.

b. Decisions will be recorded in the SAT Process document for the Licensed Training Program.

6.1.2 Design

a. The design phase of SAT for the Initial Licensed Training Program shall be completed in accordance with TQ2.ID2.

b. Decisions will be recorded in the SAT Process document for the Licensed Training Program.

6.1.3 Development

a. The development phase of SAT for the Initial Licensed Training Program shall be completed in accordance with TQ2.ID3.

b. Decisions will be recorded in the SAT Process document for the Licensed Training Program.

6.1.4 Implementation

a. The implementation phase of SAT instructions of the various programs shall be completed in accordance with TQ2.ID4.

b. Additional instructions are described in subsequent sections of this procedure as listed in the table below.

Phase	Section
Fundamentals	Fundamentals instructions in Section 6.2.
Systems	Systems instructions in Section 6.4.
Operational	Operational instructions in Section 6.5.
Pre-License Preparation	Pre-License Prep instructions in Section 6.6.

6.1.5 Evaluation

The evaluation phase of SAT for the Initial License Training Program shall be completed in accordance with TQ2.ID5.

6.2 Fundamentals Phase Instructions

6.2.1 Prerequisites

The candidate has met the prerequisites for program entry.

6.2.2 Exemptions

The entire fundamentals phase or any fundamentals topic may be exempted by obtaining a score of at least 80% on a challenge exam.

a. Challenge exams shall be administered only to those personnel whose background indicate previous education or training in the related topics/courses.

b. Determining who is eligible to participate in exemption exams shall be the responsibility of Learning Services.

6.2.3 Instructions

The following instructions for implementing the Fundamentals Phase of training shall be used:

a. Obtain and review the POI

b. Generate the class schedule, incorporating factors such as:

- recommended time allotment from the POI
- holidays
- instructor availability
  - ♦ schedule instructors for best continuity of instruction

c. All student text should be assembled before the start of the fundamentals phase.

- Obtain latest revision of text material from EDMS.
- Assemble master copy
- Have sufficient number of copies made

d. Supply clerical with program hierarchy and list of scheduled attendees

- have POI hierarchy entered into PIMS
- have assigned students linked to hierarchy

e. Conduct training in accordance with TQ2.ID4.

f. Conduct routine evaluations in accordance with TQ2.ID4.

g. Submit a weekly update of student test scores, class average and performance trends to the individual student(s) responsible Director.

6.2.4 Requirements for Phase Completion

To satisfactorily complete a phase of training, a student shall meet the following performance standards during that phase.

a. A weekly test grade of at least 80%.

AND

b. A grade of at least 80% achieved on the phase exam.

6.2.5 Remedial actions

The following actions shall be completed if performance standards are not met.

a. Weekly test <80%

A topic review test shall be administered within 7 calendar days on which the minimum acceptable grade is 80%

b. Phase exam <80%

A second exam shall be administered within 7 calendar days, on which the minimum acceptable grade is 80%

c. Retake Test/Exam <80%

The student will be evaluated by Operations and Learning Services for continuation in the program.

6.3 Generic Fundamentals Examination Section Instructions

6.3.1 Prerequisites

The following prerequisite shall be required prior to the administration of the Generic Fundamentals Examination Section (GFES).

a. Successful completion of the Fundamentals Phase of the DCPP Licensed Training Program.

6.3.2 Exemptions to GFES

The following exemptions shall be allowed for the GFES.

a. Previous completion of the GFES.

b. Previously issued RO or SRO license based on a site specific written exam that was administered after Jan 31, 1982 and included the material covered by the GFES.

6.3.3 Instructions

The GFES shall be scheduled and administered in accordance with ES-205, Procedure for Administering Generic Fundamentals Examination Program of NUREG 1021.

6.3.4 Passing criteria

A score of 80% or greater shall be required to receive credit for passing the GFES.

6.4 Systems Phase Instructions

6.4.1 Prerequisites

The following prerequisite shall be required to enter the Systems Phase of the program.

License/Certification	Prerequisites
All candidates	Shall have satisfactory completed the Fundamentals Phase of the Licensed Operator Training Program.

6.4.2 Exemptions

The entire systems phase or any systems topic may be exempted by obtaining a score of at least 80% on a challenge exam.

a. Challenge exams shall be administered only to those personnel whose background indicate previous education or training in the related topics/courses.

b. Determining who is eligible to participate in exemption exams shall be the responsibility of Learning Services.

6.4.3 Instructions

The following instructions for implementing the Systems Phase of training shall be used:

a. Obtain and review the POI

b. Generate the class schedule, incorporating factors such as:

- recommended time allotment from the POI
- holidays
- instructor availability
  - ♦ schedule instructors using subject matter experts when possible
- schedule simulator demonstration time as required
- schedule lab demonstration time as required

c. Copies of Tech Specs, Equipment Control Guidelines, System Training Guides and the Operator Information Manual should be provided to the students before the start of the systems phase.

- Obtain latest revision of material with objectives from EDMS.
- Assemble master copy
- Have sufficient number of copies made

d. Supply clerical with program hierarchy and list of scheduled attendees.

- have POI hierarchy entered into PIMS
- have assigned students linked to the hierarchy

e. Conduct training in accordance with TQ2.ID4.

f. Conduct routine evaluations in accordance with TQ2.ID4.

g. Submit a weekly update of student weekly test scores, class average and performance trends to the individual student(s) responsible Director.

h. Prior to the end of systems phase:

- Conduct OJT/TPE Training for all students and the Operator Continuing Training Program students.
- Qualify selected Operations Department staff as TPE evaluators. The selection will be performed by the Operations Director.

6.4.4 Requirements for Phase Completion

To satisfactorily complete a phase of training, a student shall meet the following performance standards during that phase.

a. A weekly test grade of at least 80%.

AND

b. A grade of at least 80% must be achieved on the phase exam.

6.4.5 Remedial actions

The following actions shall be completed if performance standards are not met.

a. Weekly test <80%

A topic review test shall be administered within 7 calendar days on which the minimum acceptable grade is 80%.

b. Phase exam <80%

A second exam shall be administered within 7 calendar days, on which the minimum acceptable grade is 80%.

c. Retake Test/Exam <80%

The student will be evaluated by Operations and Learning Services for continuation in the program.

6.5 Operational Phase Instructions

6.5.1 Prerequisites

The following prerequisite shall be required to enter the Operational Phase of the program.

License/ Certification	Prerequisites
All candidates	Shall have satisfactory completed the Fundamentals and Systems Phase of the Licensed Operator Training Program.

6.5.2 Exemptions

None

6.5.3 Instructions

The following instructions for implementing the Operational Phase of training shall be followed:

a. Obtain and review the POI

b. Generate the class schedule, incorporating factors such as:

- recommended time allotment from the POI
- number of students
- student placement in simulator teams
  - An OJT/TPE Coach (instructor) to the OJT phase to provide coaching of Operations personnel to assure consistency in OJT/TPE
- holidays
- instructor availability
- schedule simulator time
- schedule medical examinations for license candidates to be completed within 6 months of scheduled NRC examination date.

c. Copies of OJT Guide shall be provided to the students before the start of the operational phase.
   - Obtain latest revision of material with objectives from EDMS.
   - Assemble master copy
   - Have sufficient number of copies made

d. Make the following materials available in the assigned classroom.
   - all Operating Procedures
   - all Emergency Operating Procedures
   - all EOP background documents
   - all Abnormal Operating Procedures
   - abridged set of Surveillance Test Procedures
   - abridged set of Administrative Procedures

e. Supply clerical with program hierarchy and list of scheduled attendees
   - have POI hierarchy entered into PIMS
   - have assigned students linked to the hierarchy (SRO upgrade candidates will be added at this time)

f. Conduct training in accordance with TQ2.ID4.

g. Conduct evaluations as directed below.

h. Submit a monthly update of student performance trends to the responsible Director.

6.5.4 OJT/TPE Coach's duties

The following duties shall be assigned to the OJT/TPE Coach.

- Conduct training on principles of and differences between OJT and TPE. Describe methodology of how to perform a JPM in the evaluation mode.
- Observe the administration of OJT/TPE to:
  - ensure compliance with instructions in TQ2.ID4, Training Program Implementation, for in-plant training.
  - ensure consistency of checkouts and evaluations.
  - provide coaching of on shift evaluators
- Observations are documented in the OJT/TPE Guide.
- Provide feedback to Training Leader on students progress.

6.5.5 OJT/TPE Guide

The OJT/TPE Guide is described below.

a. Physical

This section requires the candidate to physically locate all components and equipment relevant to the duty area.

- Each item shall be signed and dated by the student after the student satisfactorily locates the item.

b. Oral

This section specifies the knowledge requirements which shall be successfully mastered for the proper performance of skill requirements within a given duty areas.

- Each item shall be signed and dated by the evaluator after the student demonstrates satisfactory knowledge.

c. TPE

This section specifies the tasks that shall be successfully mastered by the student within a given duty area.

- These tasks may be performed or simulated as indicated in the OJT/TPE Guide.
  - Tasks designated as perform (P) shall be based on those important and/or difficult tasks identified by Learning Services and Operations management.
  - Performance tasks may be changed to a P/S (performance or simulation) requirement based on plant conditions. This change must be initialed by a Shift Supervisor (SS).
- The requirements for satisfactory performance of each task shall be delineated in the standard included in the OJT/TPE Guide.
  - Each item is signed and dated by a qualified evaluator after the student satisfactorily performs the task as outlined in the standard.

6.5.6 Simulator Instructions: General

The instructor shall conduct Operator Initial Training in accordance with TQ2.ID4, "Training Program Implementation."

6.5.7 Simulator Instructions: Additional Guidance

Additional specific guidance for operator initial simulator training shall be as follows:

a. Task Areas

The following simulator task areas describe the training delivery requirements for simulator instructors:

- Prepare to conduct simulator training
- Conduct simulator training
- Prepare to critique simulator training
- Critique simulator training

NOTE: Specific guidance for accomplishing these tasks is included in Attachments 8.4 through 8.7.

b. Types of Scenarios

Three types of scenarios are used on the simulator:

1. Training Scenarios
   a) Uses pre-determined learning objectives
   b) Task training/coaching used on a continuing basis
   c) Competencies are evaluated and documented
   d) Subsequent critique is based on learning objectives and performance competencies
2. DCPP Template Scenarios (for training)
   a) Uses DCPP EOP Template scenarios to augment in-depth EOP training
   b) Includes pre-determined learning objectives
   c) Otherwise identical to training scenarios
3. Exam Scenarios (for evaluation)
   a) Instructors do not intervene after the crew has taken the watch
   b) Performance competencies are evaluated
   c) Performance is critiqued

d) Pass/Fail determination is made and communicated to the crew

e) Used for startup certification exam (operational portion) and simulator final exam

c. Evaluation Methods

Operator Performance is evaluated by two methods:

1. Performance competencies shall be evaluated and documented for the overall scenario (see Attachment 8.8).

2. Each event step shall be graded as SAT (S), UNSAT (U), MARGINAL, or Not Observed (NO)/Not Applicable (NA).

a) SAT - performance is at minimum acceptable level (normal amounts of training/coaching taken into account)

b) MARGINAL - Needed greater than expected intervention and/or training/coaching by instructors or crew (requires comment)

c) UNSAT - Did not complete task or needed excessive intervention by crew or instructors to complete (requires comment)

d) Not Observed/Not Applicable - If any task was not done, do not sign off and note reason for incompletion [write Part A Training Improvement Proposal (TIP) to phase administrator detailing training not accomplished and reasons; write training feedback (TFB) for any simulator problems]

Sliding Scale: Both of the above evaluation scales shall be adjusted based on the training progress of the student. Since the simulator training occurs over many weeks, the performance level expected during the first few weeks would be lower than those weeks in the middle of the course. Likewise, the expected performance level increases each week as skills are learned until the last several weeks, where all evaluation should be at exam level (training, coaching, and intervention are appropriate at all levels, based on the needs of the students).

d. Instructor Manning

Two floor instructors and a console operator should be utilized during operator initial simulator training:

1. One instructor trains, coaches and evaluates primarily the SCO and STA students
2. One instructor trains, coaches and evaluates primarily the CO and NO-8 students
3. The Lead Instructor for the session shall be the instructor whose name appears first on the training schedule and shall resolve all training conflicts during a scenario

6.5.8 Requirements for Phase Completion (OJT/TPE)

a. To satisfactorily complete the OJT/TPE part of this phase of training, a student shall meet the following performance standards during that phase.

b. Function Group Review and Approval

1. A SS review, approval and signature shall be required for each function group completion.

a) The interface of the student and the SS is intended to allow formal access to line management for the purpose of ensuring adequate training and team building.

b) The SS should sample the student's knowledge pertaining to items considered operationally important.

c) The SS should also impart skills and/or knowledge that he/she has attained in the operation of the equipment associated with this card. There is no requirement to document the items discussed in this section.

2. Training Watches

Each student shall be required to stand training watches as outlined in the Completion/Approval Requirements section of the OJT/TPE Guide.

3. The Director, Operations shall approve the student for OJT/TPE course completion by signature in the Final Approval and Records section.

STA certification requires final interview and recommendation by the Senior Operations Engineer. (based on standards in OJT/TPE Guide)

6.5.9 Requirements for Phase Completion (simulator)

a. To satisfactorily complete the simulator part of the phase of training, a student shall attain a satisfactory grade on the simulator operational exam.

STA certification requires performance observation and documentation by Operation's management to ensure necessary skills have been acquired.

b. Simulator evaluation shall be performed in accordance with TQ2.ID4. The actions which should be taken as a result of the evaluations is described below.

1. Performance in any competency area <3.0 two or more times in a training week
   - interview with phase coordinator
   - action plan developed as appropriate
2. Performance in any competency area <3.0 four or more times during two training weeks
   - interview with Operations Management
   - action plan developed as appropriate
3. Inability to maintain competency level ≥ 3.0 for three adjacent training weeks (or > 7 lessons with competency ratings < 3.0)
   - interview with Operation Management
   - reviewed for termination from program by Operation and Learning Services Management

6.5.10 Requirements for Phase Completion (classroom)

To satisfactorily complete the classroom part of this phase of training, a student shall meet the following performance standards during that phase.

a. A weekly test grade of at least 80%.

AND

b. A grade of at least 80% must be achieved on the phase exam.

6.5.11 Remedial actions

The following actions shall be completed if performance standards are not met.

a. Weekly test <80%

A topic review test shall be administered within 7 calendar days on which the minimum acceptable grade is 80%

b. Phase exam <80%

A second exam shall be administered within 7 calendar days, on which the minimum acceptable grade is 80%

c. Retake Test/Exam <80%

The student will be evaluated by Operations and Learning Services for continuation in the program.

d. Unsat on Simulator Operational Exam or Startup Cert

Develop an action plan to remediate in accordance with TQ2.ID4, including a retake examination

e. Retake Simulator Operational Exam or Startup Cert unsat

The student will be evaluated by Operations and Learning Services for continuation in the program.

6.6 Pre-License Preparation Phase Instructions

6.6.1 Prerequisites

The following prerequisite shall be required to enter the Pre-License Preparation Phase of the program.

License/Certification	Prerequisites
All candidates	Shall have satisfactory completed the Operational Phase of the Licensed Operator Training Program.

6.6.2 Exemptions

None

6.6.3 Instructions

The following instructions for implementing the Pre-License Preparation Phase of training shall be used:

a. Obtain and review the POI

b. Generate the class schedule, incorporating factors such as:

- recommended time allotment from the POI
- holidays
- instructor availability
- schedule simulator time
- schedule company audit exam

c. Establish a "frozen" set of procedures as listed below and make them available in the assigned classroom.

- Operating Procedures
- Emergency Operating Procedures
- EOP background documents
- Abnormal Operating Procedures
- abridged set of Surveillance Test Procedures
- abridged set of Administrative Procedures

d. Supply clerical with program hierarchy and list of scheduled attendees

- have POI hierarchy entered into PIMS
- have assigned students linked to the hierarchy

e. Initiate NRC Exam Eligibility Requirements Checklist for each license candidate, Attachments 8.1, 8.2 or 8.3 of this procedure.

- NRC License Exam application must be submitted greater than 30 days prior to scheduled exam date.

f. Develop practice exams.

g. Conduct training in accordance with TQ2.ID4.

h. Conduct routine evaluations in accordance with TQ2.ID4.

i. Submit a weekly update of student test scores, class average and performance trends to the responsible Director.

6.6.4 Requirements for Phase Completion

To satisfactorily complete this phase of training, a student shall meet the following performance standards.

a. Completion of company audit examination with the following requirements:

1. A grade of at least 80% must be achieved on the written exam
2. Satisfactory completion of the simulator operational exam
3. Satisfactory completion of the JPM/Oral exam package

6.6.5 Remedial actions

The results of the exam shall be evaluated by Operations and Learning Services management to formulate a final list of NRC exam candidates.

6.7 NRC Examination Security

6.7.1 Purpose

These instructions are designed to provide exam security at a level to preclude the potential to compromise any portion of the NRC Examination.

6.7.2 Applicability

These instructions shall used for all NRC examinations and may be used for company audit examination.

6.7.3 Instructions

The examination security procedure is described below:

a. If identical exams are given to successive groups of individuals, one of the two groups shall be separated from the other group from the time the first exam is started, until the last exam is completed. Separation shall be accomplished by any of the following methods:

1. One group is maintained in a building or area that is clearly physically separated from the test/exam area, i.e. the power block vs. the Learning center.
2. One group is maintained off the plant site while the other group is taking the exam.
3. If both groups are in the same building, one of the groups shall be sequestered by use of a proctor or monitor to ensure no contact is made with the other group.

4. Unless otherwise specified, after completion of the exam, students shall leave the exam area and be:

   a) sequestered from anyone taking the same exam or

   b) dismissed from the plant site

b. A single room and supporting restroom facility shall be provided for administering the written exam and they should be located to prevent students from having contact with other personnel during the exam.

c. Students shall maintain a minimum 3 feet spacing between themselves and should sit at separate tables during written exams.

d. A monitor shall be posted to ensure personnel leaving the classroom do not come in contact with others.

e. Signs shall be posted in the exam area to inform others that the exam is in progress and entry is not permitted.

f. In addition to the above requirements, test and examination material shall be controlled in accordance with TQ2.ID4, "Training Program Implementation."

g. Simulator examination security shall be developed.

   NUREG 1021 may be used as a guide for developing the plan.

7. RECORDS

The program file shall be set up for the Initial License Training Program in accordance with TQ2.ID6. The records shall be batched at the end of the program, (i.e., typically 68 weeks).

8. ATTACHMENTS

8.1 "Reactor Operator License Candidate," 10/03/96

8.2 "SRO License Candidate (Non-Degree)," 10/03/96

8.3 "SRO License Candidate (Degree)," 10/03/96

8.4 "Prepare To Conduct Simulator Training," 03/09/96

8.5 "Conduct Simulator Training," 10/03/96

8.6 "Prepare To Critique Simulator Training," 03/09/96

8.7 "Critique Simulator Training," 03/09/96

8.8 "Operator Performance Competencies," 11/06/96

9. REFERENCES

9.1 TQ1.ID3, "Training Program Management."

9.2 TQ1.ID5, "Testing Control, Administration, and Documentation For Training."

9.3 TQ1.DC1, "Licensed Operator and Senior Operator Training Program."

9.4 INPO 90-003, Guideline for the Training and Qualification of STA.

9.5 ANSI/N18.1-1971, Selection and Training of Nuclear Power Plant Personnel.

9.6 NRC letter to all licensees 3/80, Denton Letter.

9.7 10 CFR 55, Operators' Licenses.

9.8 ACAD 91-012, Guidelines for Training and Qualification of Licensed Operators.

9.9 NUREG 1021, Operator Licensing Examiner Standards.

9.10 ACAD 91-002, Guidelines for Training and Qualifications of Licensed Operators.

9.11 ACAD 85-006, Principles of Training System Development.

9.12 ACAD 90-003, Guidelines for the Training and Qualifications of Shift Technical Advisors.

9.13 INPO Accreditation Report, 01/19/96.

10. SPONSOR

J. Welsch

REACTOR OPERATOR LICENSE CANDIDATE

CANDIDATE NAME: _____

		YES	NO
1.	TRAINING		
	Licensed Operator Training Program Phases satisfactorily completed.	☐	☐
	Manipulation of controls during at least 5 significant reactivity changes.	☐	☐
	At least 13 weeks as an extra person on shift in training.	☐	☐
	Satisfactory completion of the Generic Fundamentals Examination.	☐	☐
2.	EXPERIENCE		
	At least 1 year DCPP experience, inclusive in the 3 years power plant experience.	☐	☐
	At least 6 months at DCPP performing operational duties as a Non-Licensed Operator.	☐	☐
3.	TRAINING RECORD - Up-to-date and complete.	☐	☐
4.	NRC MEDICAL EXAM - Satisfactory, completion within 6 months of scheduled exam date.	☐	☐
5.	NRC LICENSE EXAM APPLICATION -Satisfactory, 30 days minimum prior to scheduled exam date.	☐	☐
6.	High School diploma or equivalent.	☐	☐
7.	Candidate is recommended for license examination.		

_____ / _____

Training Leader Date

SRO LICENSE CANDIDATE (NON-DEGREE)

CANDIDATE NAME: _____

		YES	NO
1.	TRAINING		
	Licensed Operator Training Program Phases satisfactorily completed.	☐	☐
	At least 13 weeks as an extra person on shift in training, including 6 weeks with either unit at power levels >20%.	☐	☐
	Satisfactory completion of the Generic Fundamentals Examination.	☐	☐
2.	EXPERIENCE		
	At least 4 years power plant experience.	☐	☐
	At least 2 years nuclear power plant experience, inclusive in the 4 years power plant experience.	☐	☐
	At least 12 months as a Licensed Reactor Operator (exclusive of training time).	☐	☐
	At least 6 months at DCPP, excluding training time in the 2 years of nuclear power plant experience.	☐	☐
3.	TRAINING RECORD - Up-to-date and complete.	☐	☐
4.	NRC MEDICAL EXAM - Satisfactory, completion within 6 months of scheduled exam date.	☐	☐
5.	NRC LICENSE EXAM APPLICATION -Satisfactory, 30 days minimum prior to scheduled exam date.	☐	☐
6.	Candidate is recommended for license examination.		

_____ / _____

Training Leader Date

SRO LICENSE CANDIDATE (DEGREE)

CANDIDATE NAME: _____

		YES	NO
1.	TRAINING		
	Licensed Operator Training Program Phases satisfactorily completed.	☐	☐
	At least 13 weeks as an extra person on shift in training, including 6 weeks with either unit at power levels >20%.	☐	☐
	Satisfactory completion of the Generic Fundamentals Examination.	☐	☐
2.	EXPERIENCE		
	At least 4 years power plant experience.	☐	☐
	At least 2 years nuclear power plant experience, inclusive in the 4 years power plant experience.	☐	☐
	At least 6 months at DCPP, excluding training time in the 2 years of nuclear power plant experience.	☐	☐
3.	TRAINING RECORD - Up-to-date and complete.	☐	☐
4.	NRC MEDICAL EXAM - Satisfactory, completion within 6 months of scheduled exam date.	☐	☐
5.	NRC LICENSE EXAM APPLICATION -Satisfactory, 30 days minimum prior to scheduled exam date.	☐	☐
6.	Candidate is recommended for license examination.		

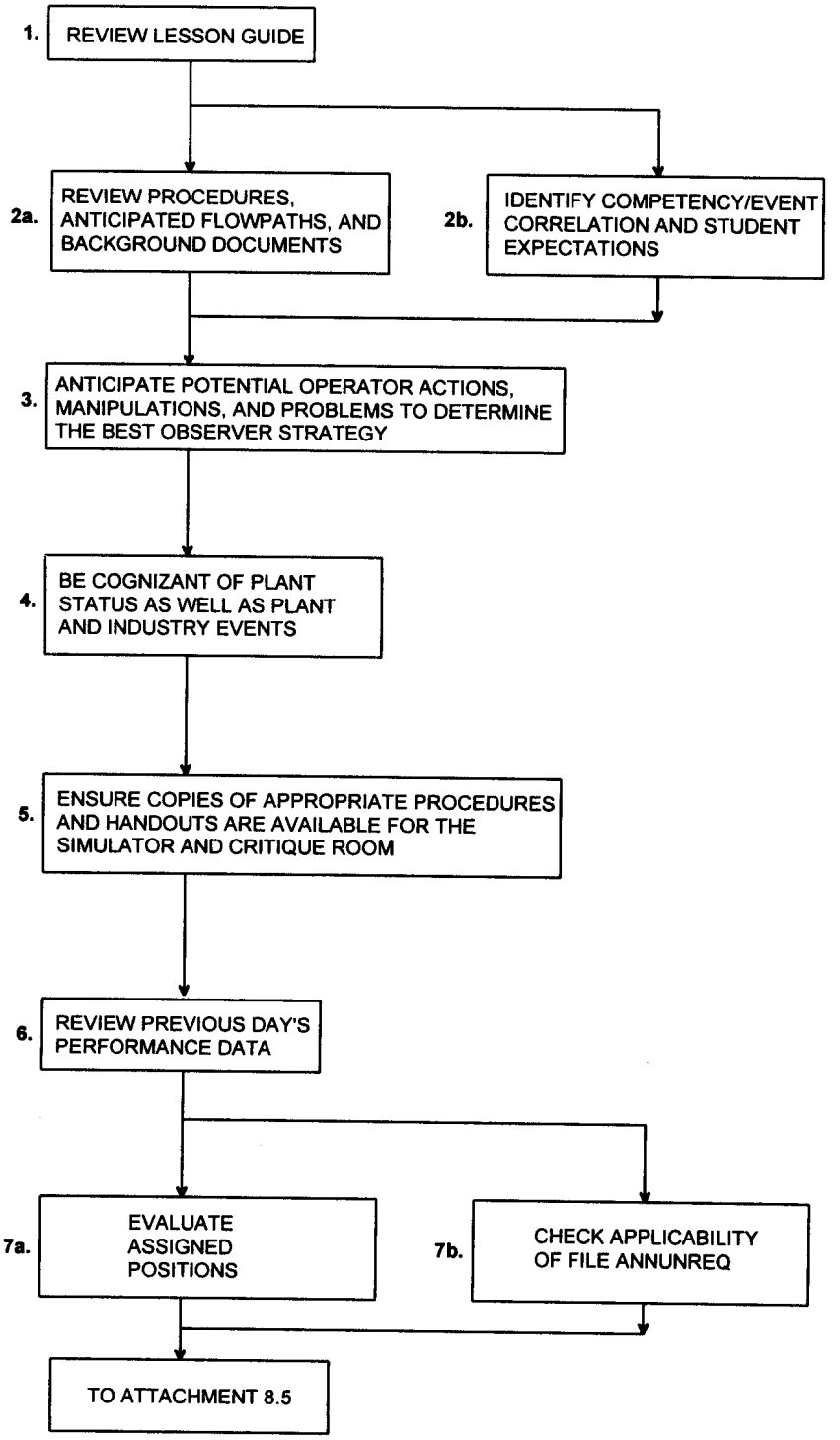
_____ / _____

Training Leader Date

PREPARE TO CONDUCT SIMULATOR TRAINING

1. Process

The process of preparing to conduct simulator training is detailed out in the below diagram.



PREPARE TO CONDUCT SIMULATOR TRAINING

2. Procedure

The following steps detail out the procedure to prepare to conduct simulator training.

Step	Actions
1	Review Lesson Guide • Review lesson objectives to gain an understanding of how/where each objective is met. • Develop a feel for the content and flow of the lesson by reviewing the lesson guide "Attachment 1," noting the major events and timeline. • Review any outstanding TIPs on the lesson, planning where/how to incorporate them into the lesson. Note these TIPs (with a remark) on the signup sheet for the day.
2a	Review Procedures, Anticipated Flowpaths, and Background Documents • Determine the procedure flowpath and anticipate possible procedure problems that may arise based on instructor experience. • Review background documents to become familiar with major action categories (MACs), identifying difficult and unfamiliar steps that can be emphasized during the session if problems arise.
2b	Identify Competency/Event Correlation and Student Expectations • Review the competency areas for applicability to each scenario event. • Plan to emphasize those competencies having a greater applicability during specific events. • Ensure that both technical and process competencies are trained, coached, and emphasized during each scenario. • Determine the expected level of student competency performance based on simulator training completed.
3	Anticipate Potential Operator Actions, Manipulations, and Problems to Determine the Best Observer Strategy • Determine which positions will be most heavily tasked during the various events and determine the optimum location(s) for observation. • Select the best location to observe the performance of procedure steps known to have been a problem in the past.

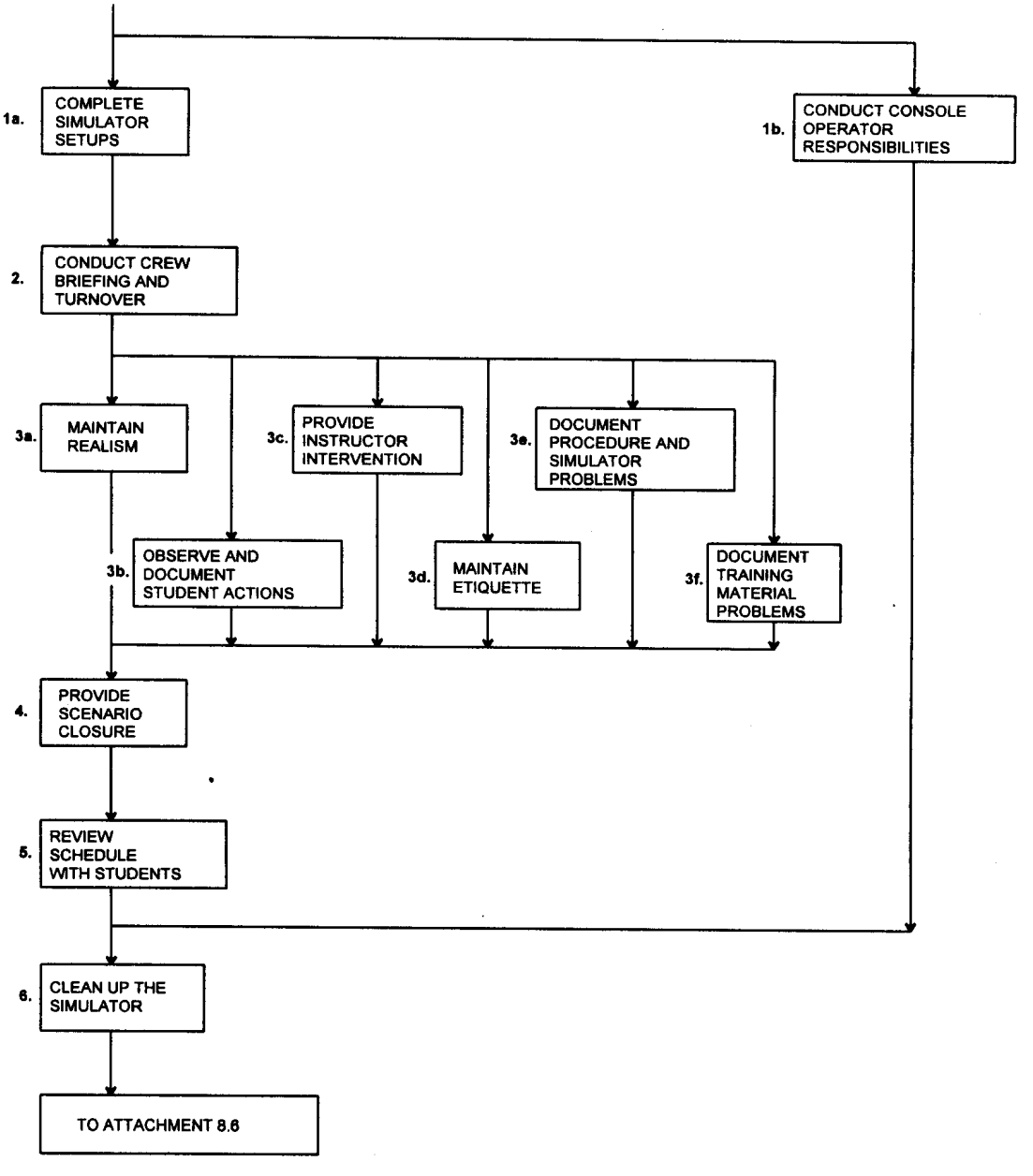
PREPARE TO CONDUCT SIMULATOR TRAINING

Step	Actions
4	Be Cognizant of Plant Status and Plant/Industry Events • Review the write-up for Industry Events listed in the references to gain an understanding of how the lessons learned apply. • Be aware of plant conditions in Units 1 & 2 which could affect the applicability and progression of the scenario.
5	Ensure Copies of Appropriate Procedures and Handouts are Available for the Simulator and Critique Room • Ensure adequate copies of AOPs, EOPs, and other required documents/forms (STPs, ECPs, etc.) are available in the Simulator and Critique Room. • Ensure adequate copies of Lesson Guide "Attachment 2s" and Shift Turnover Sheets are available.
6	Review Previous Day's Performance Data • Assess strong performance and challenge areas to bring to the attention of the team. • Challenge areas may affect the evaluation of assigned positions (see Item 7).
7a	Evaluate Assigned Positions • Team member rotation is normally assigned by the Simulator Plan of Instruction (POI). • If a significant challenge was previously shown by a team member at a specific position, note the problem so that the student can be trained appropriately the next time he/she is assigned to that position. • Students rotation should only be altered during the last few weeks of the course, and then only after consulting the phase administrator (must ensure all objectives and plant manipulations are completed). • Determine the Lead Instructor.
7b	Check Applicability of File 'ANNUNREQ • ANNUNREQ shall not be filed during examinations. • Ensure ANNUNREQ will not negatively impact the training scenario if used. • ANNUNREQ should not be filed during the first several weeks of simulator training, but it may be used thereafter during simulator training. • Ensure adequate documentation is available to support out of service (OOS) equipment.

CONDUCT SIMULATOR TRAINING

1. Process

The process of preparing to conduct simulator training is detailed out in the below diagram.



CONDUCT SIMULATOR TRAINING

2. Procedure

The following steps detail out the procedure to conduct simulator training.

Step	Actions
1a	Complete Simulator Setup • Complete all setups in accordance with the Lesson Guide "Attachment 1," "Simulator Setup," and "Machine Setup."
1b	Conduct Console Operator Responsibilities • Review the lesson guide. • Check Lesson Guide Attachment 1 and Drill File(s), if applicable, for accuracy. • Perform the "Simulator Setup." • Perform the roles of outside personnel/departments/agencies, using directed repeatback communications when responding verbally to directions or requests. • Input plant conditions (MALs, LOAs, GCFs, etc.) at the proper time. • Dedicate full time to activities which support the simulator scenario. • Should maintain continuous communication capability with the floor instructors. • Apprise floor instructors of event timing and phone/radio communications. • Maintain a chronological log of calls, events, and plant condition changes for complex scenarios. • Ensure proper video display as directed by lead instructor. • Perform scenario modifications as directed by the lead instructor. • Apprise the lead instructor of tour groups that arrive/leave during the scenario. • Ensure timely feedback to crew when actions or information is requested. • Initiate TFBs for simulator problems. • Obtain concurrence from the lead instructor prior to admitting outside personnel to the simulator floor.

CONDUCT SIMULATOR TRAINING

Step	Actions
2	Conduct Crew Briefing and Turnover 1. Inform crew of: a. Position assignments (Control Room & NOs) b. Plant support personnel assignments (MM, EM, ENG, etc.) c. Instructor roles (U-2 SFM, CRA, IELC, etc.) 2. Brief the team on strengths and challenges from past sessions 3. Brief the team on any simulator changes 4. Conduct shift turnover by briefing the crew on existing plant conditions: a. OOS equipment b. Tech Spec Actions in effect c. Power history, boron concentration, and rod position d. Planned shift evolutions
3a	Maintain Realism • Respond to shift turnover questions with information consistent with realistic plant data. • Ensure that time expenditure and feedback are consistent with expected plant responses. • Inform students if time compression is to be used. • Maintain the same watchstander names throughout the scenario. • Allow the crew to control the carpet area activities in accordance with approved policies and procedures. • Refrain from comments/actions on simulator anomalies which distract from realism, such that operators address ALL conditions to the extent possible. • Ensure crew communications are directed to the correct role player. • Avoid using the term "simulator" after turnover is conducted.

CONDUCT SIMULATOR TRAINING

3b	Observe and Document Student Actions • Be in the optimal position to observe Expected Operator Actions. • Direct the console operator to select the optimal video display. • Track unfamiliar procedure flowpaths using an extra set of reference procedures. • Observe and document each assigned individual's actions relative to the Expected Operator Actions. • Observe individual and team actions relative to Performance Competencies. • Record the time of key indications and significant operator activities. • Make comments and record observations based on Expected Operator Actions on the lesson guide Attachment 2 (include both individual and team).
3c	Provide Instructor Intervention 1. Provide technical input/instruction as preplanned or deemed appropriate. 2. Maintain timeline to ensure completion of scenario objectives. 3. Maximize use of simulator time: a. If it is determined that the scenario will be completed early, or if it is completed early, supplement the scenario with activities that support the lesson objectives (or completion of student manipulations in later weeks of training). b. Do not intentionally time compress the scenario to insert additional activities. 4. Maintain flexibility in managing unplanned implementation of legitimate alternate success paths. 5. Use simulator features deemed necessary by the lead instructor to emphasize lesson objectives and facilitate student learning: a. REPLAY b. FREEZE c. BACKTRACK 6. FREEZE the simulator while covering training topics with the entire crew, or when the crew's attention is to be focused on discussions with the instructors: a. Make it clear to all students that the simulator is in FREEZE. 7. Give a short turnover prior to returning to RUN, placing a strong emphasis on student performance expectations. a. Provide crew coaching as needed.

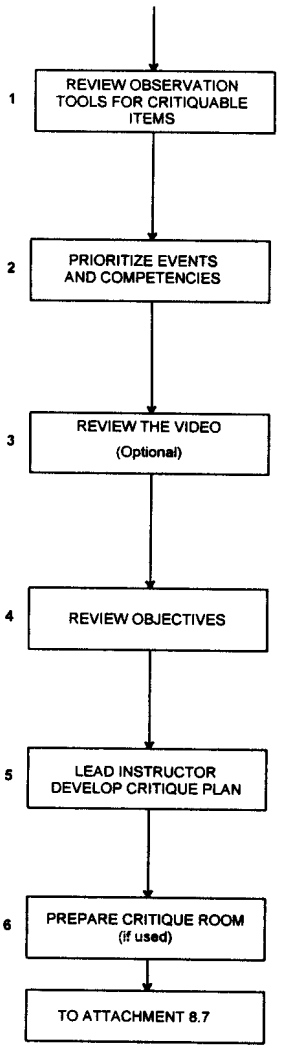
CONDUCT SIMULATOR TRAINING

Step	Actions
3d	Maintain Etiquette • Keep the crew informed of tour groups. • Conclude scenario on time to allow proper setup time for the next group. • Allow the crew to control carpet area activities in accordance with approved policies and procedures. • Direct all non-control room personnel to observe the approved control room access policies and procedures. • Maintain professional instructor/evaluator demeanor.
3e	Document Procedure and Simulator Problems • Note simulator conditions that are NOT considered to be true plant responses (either from observation or crew feedback) and ensure a TFB is initiated. • Note procedure problems and initiate the appropriate corrective action. • Inform the oncoming instructors of all identified problems.
3f	Document Training Material Problems • Note lesson and other training material problems and initiate appropriate corrective actions per the TIP system.
4	Provide Scenario Closure (Simulator Frozen) 1. Facilitate a final crew tailboard covering the following: a. what has happened b. where we are now c. where we are going and how we are going to get there 2. Discuss the final event classification.
5	Review Schedule with Crew • Inform crew of next activities and locations
6	Clean up the Simulator • Return all materials to their proper locations. • Collect all notes/turnover sheets. • Assist the oncoming instructors with simulator setups. • Ensure the booth is left in good condition. • Ensure the coffee pot is turned off if there is no oncoming shift.

PREPARE TO CRITIQUE SIMULATOR TRAINING

1. Process

The process of preparing to critique simulator training is detailed out in the below diagram.



PREPARE TO CRITIQUE SIMULATOR TRAINING

2. Procedure

The following steps detail out the procedure to prepare to critique simulator training.

Step	Actions
1	Review Observation Tools for Critiquable Items The Lead Instructor should: 1. Review notes on lesson guide "Attachment 2" by event. 2. Evaluate Critiquable Items flagged during observation. 3. Identify additional Critiquable Items with input from 2nd floor instructor, if available. 4. Substantiate evaluation by reviewing reference material as necessary. a. Technical Specifications b. Final Safety Analysis Report (FSAR) c. Procedures d. Background Documents e. Operations Department Policies f. General Operating Orders 5. Review Performance Competencies versus the events performed
2	Prioritize Events and Competencies The Lead Instructor should: • Identify as Mandatory Critiquable Items any Event Competency Ratings <3 and any Expected Operator Actions rated as M or U.
3	Review the Video (if used) 1. Identify as possible Critiquable Items any sequences which: a. Demonstrate positive results of successful competency performance b. Allow self-critiquing of competency performance relative to applicable standards c. Allow clarification of procedure usage. 1) Transitions 2) Step Interpretation 3) Missed step or RNO 2. Determine at least one anchor point for indexing, as well as start and stop points for video sequences, if video is to be used.

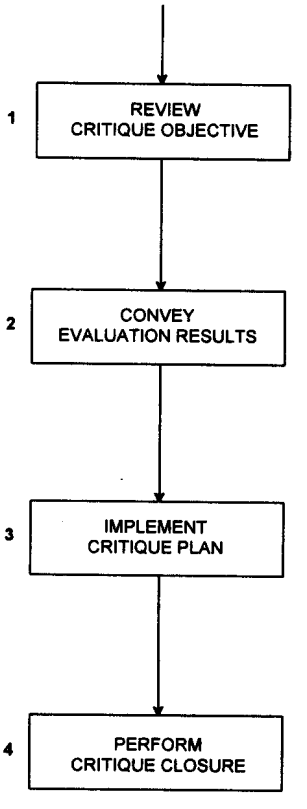
PREPARE TO CRITIQUE SIMULATOR TRAINING

Step	Actions
4	Review Objectives • Identify as mandatory Critiquable Items any Lesson Objective not covered during crew performance of scenario.
5	Lead Instructor Develop Critique Plan 1. Organize Critiquable Items. a. Generate chronology ordered Critique Plan by highlighting lesson guide Attachment 2 or consolidating comments on separate paper. b. Link video sequences with Critiquable Items and record start/stop points on Critique Plan (if video used). 2. Flag the highest priority Critiquable Items. a. Mandatory Critiquable Items (1's, 2's, M's, or U's) b. Good performance should be emphasized by considering at least one significant positive item (ideally to be used as part of the Introduction and the Closure). c. Other significant items 3. Flag Emphasis Competencies (those competencies you wish to stress), as time permits. 4. Develop Facilitative Questions (formally as time permits).
6	Prepare Critique Room (if used) 1. Verify room is clean. 2. Verify a round table configuration. 3. Verify material inventory. 4. Attendance sheet a. Copies of lesson guide attachment for Related Industry Events b. Copies of lesson guide attachment for Lesson Objectives c. Set of reference books d. VCR and monitor e. Overhead projector

CRITIQUE SIMULATOR TRAINING

1. Process

   The process of critiquing simulator training is detailed out in the below diagram.



CRITIQUE SIMULATOR TRAINING

2. Procedure

The following steps detail out the procedure to critique simulator training.

Step	Actions
1	Review Critique Objective During the first critique of each week review the objective of the Critique period: • The objective of the critique is to perform an in-depth evaluation of team performance to identify Lessons Learned which can be used to optimize performance should a similar event occur in the future.
2	Convey Evaluation Results • Convey team and individual evaluation results (SAT/UNSAT)
3	Implement Critique Plan (normally performed immediately after scenario break on the floor of the simulator; may also be done in critique room if time permits). 1. Maintain a list of Lessons Learned to support the critique conclusion. 2. Review the scenario (use facilitative mode or tell mode as appropriate to student progress in course). a. Refer to critique preparation questions and Emphasis Competencies on white board (if used). b. Highlight strengths and challenges. c. Encourage the crew to discuss OP1.DC11 and OP1.DC12 performance expectations. d. Interject facilitative questions to promote crew member involvement and to allow for critique timeline/objective coverage. 3. Manage Critique timeline. a. Maintain discussion within time restraints. b. Ensure coverage of mandatory Critiquable Items. 4. Show video sequences to support observations and reinforce strengths (if used). 5. Distribute Handouts. a. Copies of lesson guide attachment for Related Industry Events b. Copies of lesson guide attachment for Lesson Objectives c. (normally available in book on sim, floor only) d. Additional materials identified
4	Perform Critique Closure • Review Lesson Objectives. • Review and emphasize the list of Lessons Learned. • Ensure strengths/challenges portion of whiteboards is completed, giving each student a copy (if used). • Review the schedule. • Ensure the critique room is suitable for the next critique (if used).

OPERATOR PERFORMANCE COMPETENCIES

PROCESS COMPETENCIES	TECHNICAL COMPETENCIES
Communications • Applies standard terminology • Provides value and trend data • Directs communications to individuals • Uses 2-way communications for information • Uses 3-way communications for directions Rating _____	Diagnostics/Understanding System Response • Acts on trends and off normal status • Uses appropriate reference material • Interprets system indicators • Understands response to action or inaction Rating _____
Team Skills • Advocates • Each individual maintains team involvement • Exhibits team problem solving Rating _____	Use of Procedures/Tech Specs • Enters appropriate procedures • Verifies entry conditions • Follows rules of usage • Applies procedure steps accurately • Applies Tech Specs and ECGs accurately • Performs immediate actions from memory Rating _____
Leadership/Command & Control • Prioritizes tasks • Manages resources • Directs focus on relevant information • Maintains overview • Conducts effective tailboards • Makes decisions • Approves SCO directives • Approves transitions and deviations • Announces plant status changes Rating _____	Control Board Operations • Manipulates control switches accurately • Locates system indicators and controls accurately • Demonstrates skilled operation of control systems • Takes manual control when necessary • Uses self-verification Rating _____

RATING KEY

4 - **Very strong/always: DCPP goal**
3 - **Strong/routinely: DCPP Competency Standard**
2 - **Weak/seldom: Detracted from other competencies**
1 - **Non-existent/negative consequence: Equipment or personnel jeopardy**

TITLE: LICENSED OPERATOR, NON-LICENSED OPERATOR, AND SHIFT TECHNICAL ADVISOR CONTINUING TRAINING PROGRAMS

APPROVED:		
MANAGER - OPERATIONS SERVICES	07/31/97 DATE	08/01/97 EFFECTIVE DATE

SPONSORING ORGANIZATION: NPG LEARNING SERVICES
PROCEDURE CLASSIFICATION: QUALITY RELATED
REVIEW LEVEL: "A"

TABLE OF CONTENTS

1. SCOPE

This procedure delineates the requirements for the continuing training of:

- Senior Reactor Operators (SRO)
- Reactor Operators (RO)
- Shift Technical Advisors (STA)
- Nuclear Operators (NO)

2. DISCUSSION

2.1 Licensed Operator, Non-Licensed Operator, and Shift Technical Advisor Continuing Training Programs, hereafter referred to as the Operator Continuing Training Program, maintain operator competence, including that which is required for infrequent, abnormal, or emergency situations.

2.2 Entry into the Operator Continuing Training Program requires successful completion of one of the following:

- Level 6 Nuclear Operator Qualification
- The Licensed Operator and Shift Technical Advisor Initial Training Program

3. DEFINITIONS

3.1 **Annual** - For the purposes of this procedure, is defined as a 12-month period specified in the Program of Instruction (POI).

3.2 **Biennial** - For the purposes of this procedure, is defines as a 24-month period specified in the (POI).

4. RESPONSIBILITIES

4.1 **Director, NPG Learning Services** - overall implementation of the Operator Continuing Training Program and ensuring that training commitments are met.

4.2 **Director, Operations**

- ensuring the content of the Operator Continuing Training Program, including assurance that the program is maintained current and reflect plant modifications, changes to procedures; industry operating experience, and regulatory changes
- ensuring that independent evaluations are conducted
- approving operator Probabilistic Risk Assessment (PRA) tasks

4.3 **Training Leader**

- supervising the effective coordination and implementation of the Operator Continuing Training Program.
- evaluating program effectiveness
- program records management
- ensuring that the requirements of this procedure are met

- ensuring the training presented meets the needs identified by the Director, Operations.
- ensuring reporting requirements are met

4.4 Session Leader

- establishing session content
- implementing this procedure

4.5 Instructor

- the content and accuracy of the training provided in the Operator Continuing Training Program.

5. INSTRUCTIONS

5.1 The Systematic Approach to Continuing Training

5.1.1 Analysis

The analysis phase of the Systematic Approach to Training (SAT) for the Operator Continuing Training Program shall be in accordance with TQ2.ID1, "Training Program Analysis." Decisions shall be recorded in the SAT process document for Operator Continuing Training.

5.1.2 Design

The design phase of SAT for the Operator Continuing Training Program shall be in accordance with TQ2.ID2, "Training Program Design." Decisions shall be recorded in the SAT process document for Operator Continuing Training.

5.1.3 Development

The development phase of SAT for the Operator Continuing Training Program shall be in accordance with TQ2.ID3, "Training Program Development." Decisions shall be recorded in the SAT process document for Operator Continuing Training.

5.1.4 Implementation

a. The implementation phase of SAT for the Operator Continuing Training Program shall be in accordance with TQ2.ID4, "Training Program Implementation." Decisions shall be recorded in the SAT process document for Operator Continuing Training. Additional guidance for the implementation phase of the Operator Continuing Training Program is included in this procedure.

5.1.5 Evaluation

The evaluation phase of SAT for the Operator Continuing Training Program shall be in accordance with TQ2.ID5, "Training Program Evaluation." Decisions shall be recorded in the SAT process document for Operator Continuing Training.

5.2 Prepare a Program of Instruction (POI) for a Continuing Training Cycle

5.2.1 Purpose

The purpose of "Prepare a Program of Instruction (POI) for a Continuing Training Cycle" is to provide instructions for the creation of a POI specific to Operator Continuing Training. The POI covers training content presented during a biennial cycle.

5.2.2 Instructions

The instructions associated with the creation of a POI are located in TQ2.ID3.

5.2.3 The following items are commitments and shall be included in the POI to be covered during the biennial cycle, unless otherwise noted:

a. Ensure the capability to accurately monitor the reactor coolant system subcooling margin.

b. Instruction in heat transfer, fluid flow, thermodynamics and mitigation of accidents involving a degraded core

- Reactor and plant transients
- Equipment and systems to control or mitigate core damage
- Incore, excore and vital instrumentation, primary chemistry, radiation monitoring and gas generation

c. Annual course on AWARENESS and checking other instruments for system response to Hagen controller changes.

d. Each Shift Technical Advisor shall receive training in design and layout, including instrumentation and controls in the Diablo Canyon Control Room. (Nureg 0737)

- PG&E shall train the Shift Technical Advisors on plant specific items such as Technical Specifications, Operating Procedures and Plant Systems. (DCL 84-111)

e. Significant difference between the reactor core and the simulator core model.

f. ATWS event training.

g. Annual self-contained breathing apparatus refresher training.

h. Training on all emergency and abnormal operating procedures shall be conducted within each biennial cycle for the licensed portion of the Operator Continuing Training Program.

5.2.4 Additional Instructions

The Training Leader should consider the following during the development of a Continuing Training Cycle POI:

Item	Description
1	The Operations Continuing Training Steering Committee (OCTSC) meeting is used to obtain Operations' input on Operator Continuing Training. As a minimum, Training Improvement Proposals (TIPs) assigned to Operator Continuing Training and (PRA) topics should be considered for inclusion in the POI. Other topics identified, including those from evaluations, outage topics, and line management guidance, may be considered. Additionally, the following applicable topics should be considered for inclusion in each session. • Recent Industry Events (RIE) • Design Change Notices (DCNs) • Procedure Update (PU)
2	A Sample Plan should be developed to document all training provided over a biennial cycle in the licensed portion of the Operator Continuing Training Program.

Item	Description (Continued)
3	• The POI should offer at least 160 hours of training, which includes at least 70 hours of simulator training and associated critique time annually for the licensed and STA portion of the Operator Continuing Training Program. • The Non-Licensed portion of the Operator Continuing Training Program should offer at least 80 hours of training, which includes at least 8 hours of simulator participation each continuing training year. • Not included in training hours are collateral duties, such as: ◆ Fire Brigade ◆ Hazardous Materials ◆ General Employee Training (GET)
4	Changes to the POI on a session-to-session basis are allowed as necessary due to management expectations or steering committee input. These changes should be incorporated into the POI.

5.3 Prepare a Sample Plan

5.3.1 Purpose

a. The purpose of the Sample Plan is to maintain a "living" document of the lesson material taught in a two year continuing training cycle for licensed operators and STAs. This information is used to build the annual and biennial examinations. This ensures that material taught in the cycle receives proper emphasis.

b. There are two parts to the Sample Plan:

- The Sample Plan database which documents the information concerning the lessons taught and the amount of time (emphasis) for each lesson.
- The Vision "Buckets" for each lesson's objectives.

5.3.2 Description

a. The Sample Plan database consists of classroom and simulator spreadsheets. Each spreadsheet has the following headings:

1. Lessons taught

2. Lesson Topic Areas, which include:

- Vision Duty Areas, including fundamentals topics
- Abnormal procedures
- Emergency procedures
- Administrative Procedures
- Operations Policies
- Normal operating procedures
- Recent Industry Events
- Miscellaneous, including annunciator response procedures, licensing documents, and the Emergency Plan.

b. A time-weighted value is entered into the appropriate topic area(s) for each lesson taught. The time-weighted value will help determine the amount of emphasis placed in each topic area for the continuing training cycle. The time-weighted value is entered two ways:

1. For a classroom lesson, the time-weighted value is entered by typing the number of minutes for each lesson spent in the appropriate topic area(s).

2. For a simulator lesson, the time-weighted value is entered by typing the percentage of event time for each lesson.

- Each simulator lesson is divided into events.
- Each event contains one or more procedures (Topic Areas).
- The time emphasis of each procedure used within an event determines the procedure's percentage for that event. This is the percentage of event time entered into the database.

5.3.3 Instructions

The following steps shall be used for entering data into a Sample Plan database:

Step	Action
1	For classroom lessons, type the name of the lesson into the lesson field and enter the time in minutes for that lesson into the appropriate topic area(s).
2	For simulator lessons, type the name of the lesson into the lesson field. Time is entered by placing the appropriate percentage of an event time into the appropriate topic area(s).

5.4 Prepare For Session Training

5.4.1 Purpose

The purpose of "Prepare for Session Training" is to provide instructions for assembling materials necessary for training.

5.4.2 Training Settings

The training settings and methods of the Operator Continuing Training Program are:

- Classroom
- Laboratory/Simulator
- On-the-Job Training

5.4.3 Instructions

The instructor shall prepare for continuing training in accordance with TQ2.ID3.

5.4.4 Additional Instructions

a. The following additional guidance is required for preparing for Operator Continuing Training.

b. The session leader should perform the following:

Step	Action
1	Obtains the session lesson subjects from the POI in accordance with TQ2.ID3.
2	Meets with the session Steering Committee to determine any changes to the POI for the session and determine appropriate training settings.
3	Meets with the session instructors to determine individual instructor teaching and D-CRIER assignments.
4	Ensures security of all tests and exams is in accordance with TQ2.ID4.
5	Ensures lessons from the previous sessions that were not tested are tested during the current session.
6	Ensures exam bank materials used in the session preceding an exam session are not used during the exam session.
7	Ensures completed lessons are routed for review and approval in accordance with TQ2.ID3.
8	Ensures the session files are created in accordance with TQ2.ID6, "Training Records Management."
9	Ensures a First Run is scheduled, with appropriate line management, subject matter experts, non-licensed operators and instructors invited as students.
10	Ensures instructors are scheduled to support planned in-plant training.
11	Ensures a procedure binder for applicable simulator lessons is developed.
12	Ensures lesson attendance sheets are created in accordance with TQ2.ID6.
13	Ensures the Attendance Tracking Spreadsheet is created in accordance with this procedure. (See Section 5.6.)

Step	Action (Continued)
14	Ensures that the weekly training schedules are created.
15	Ensures the necessary classrooms are reserved.
16	Ensures that the Operator Continuing Training student lesson guide package is assembled, and sufficient copies are available each week.
17	Ensures that the sample plan and the POI are updated according to "Prepare a Sample Plan," and the "Prepare a Program of Instruction (POI) for a Continuing Training Cycle."
18	Ensures that all reference materials are the current revision.

19	Meets with the next week's training crew's shift supervisor and:
	• reviews the training schedule.
	• reviews the student groups and revises the groups as directed by the shift supervisor.
	  • To facilitate the Operations Director and Crew SS evaluation, if possible, personnel need to be in their normal positions. To accomplish this fill the Group I and II SS positions as follows:
	  1. 1st choice is crew SS.
	  2. 2nd choice is F-troop or dayshift SS.
	  3. 3rd choice is off crew SRO, admin. license, or instructor.
	• provides crew and individual training performance from the previous training week.

c. The instructor should perform the following:

Step	Action
1	Receives teaching assignments.
2	Determine scope of assignments using methods listed below, in order of preference: • Interview operations personnel after shift brief. • Interview operations personnel during their training week. • Interview operators at the watchstation applicable to the topic. Multiple crews should be interviewed using this method. • Use *@OPS e-mail and phone calls to individuals may be utilized, but these methods should not be used without using one of the previous methods.
3	Obtains Vision objectives in accordance with TQ2.ID2. For non-licensed operator topics include objectives that support the following, as applicable: • Application of theory that is specific to the particular system or component. • Troubleshooting and problem resolution specific to the particular system. • Readings taken on the roundsheets, i.e., readings at different power levels/modes and include explanations for what is stated in the basis documents, including ramifications if readings are out of specification. Include weekly rounds as well.
4	Updates the Vision lesson buckets with the lesson objectives in accordance with TQ2.ID2.
5	Develops the lesson guide and associated test questions, using Vision objectives, in accordance with TQ2.ID3.

Step	Action (Continued)
6	Develops the session written and simulator tests or exams, in accordance with TQ2.ID3 and TQ2.ID4.
7	Updates the Test Generator question "Comment" field for each question used in a session test to indicate that a review, revision, or creation of the question has occurred, and the date the question was used.
8	Routes the lesson to the session leader to complete the review and approval process in accordance with TQ2.ID6.

5.4.5 Simulator Lesson Guides

In addition to the guidance in TQ2.ID3, a simulator lesson guide should include the following specific sections and attachments:

Lesson Guide (LG)	The LG should include the following sections: • Preparation • Simulator pre-session set-up • Session outline • Major event summary and scenario objectives • Scenario closure • Prepare for critique
LG Attachments: Simulator Console Operations	The following information should be included in LG Attachment 1: • Simulator set-up, including: ♦ Initialization file ♦ Drill files necessary prior to crew walkdown • Control Board set-up, including: ♦ Switches needing re-alignment ♦ Control board tag placement • Timeline and instructor actions, including: ♦ Session drill file ♦ Necessary booth operator notes and cues ♦ Necessary booth operator manual inputs

Simulator Event Sequence	The following information should be included in LG Attachment 2: • Performance documentation, including: ♦ Pass/fail results, if applicable • Expected operator actions, including: ♦ Expected operator actions ♦ Identifies critical tasks, if applicable
Performance Competencies (1 for each event)	The following information should be included in LG Attachment 3: • List of process competencies ◊ Communications ◊ Team Skills ◊ Leadership/Command and Control • List of Technical Competencies ◊ Diagnostics/Understanding System Response ◊ Use of Procedures/Tech Specs ◊ Control Board Operations • Competency Rating Key 4 = Very Strong/Always: DCPP Goal 3 = Strong/Routinely: DCPP Competency Standard is met 2 = Weak/Seldom: Expectations are not met, or detracted from other competencies. 1 = Non-existent/Negative Consequences: Equipment or Personnel Jeopardy
Competency Matrix	The following information should be included in LG Attachment 4: • A matrix which documents the following: ♦ Competency ratings per event ♦ Average competency rating per event ♦ Average competency rating per session ♦ Table for computing rating averages

Crew Turnover Sheet	The following information should be included in LG Attachment 5: • Status of U-1 • Status of U-2 • Equipment OOS/T.S. actions in effect • Power history/core critical data • Boron concentration • Planned shift evolutions ♦ Status of personnel in containment
Shift Supervisor (SS) Competencies	The following information should be included in the LG Attachment 6 when used for simulator examinations. • List of SS Competencies

5.5 Conduct Session Training

5.5.1 Purpose

The purpose of "Conduct Session Training" is to provide instructions for conducting Operator Continuing Training.

5.5.2 General Instructions

The instructor shall conduct Operator Continuing Training in accordance with TQ2.ID4.

5.5.3 Simulator Instructions

a. Simulator training and evaluation shall be conducted in accordance with TQ2.ID4.

b. Two types of scenarios are used on the simulator:

Scenario	Description
Evaluation Scenario	• Evaluators do not intervene after crew has taken the watch • Performance competencies are evaluated • Subsequent critique is based on competency matrix • Pass/fail determination is made and communicated to the crew
Training Scenarios:	• Uses pre-determined learning objectives • Instructor intervenes at designated points identified in the lesson guide, as appropriate • Instructor may intervene at other points when deemed appropriate • Competencies should be evaluated • Subsequent critique focuses on learning objectives and may include items on the competency matrix

c. A minimum of two evaluators should be utilized during evaluation scenarios:

- One evaluator evaluates the senior control operator (SCO), control operator (CO), and Balance of Plant Control Operator (BOPCO) positions
- The lead evaluator evaluates the shift supervisor (SS), shift foreman (SFM), and shift technical advisor (STA) positions. In addition, the lead evaluator evaluates team performance.
- During examinations, additional evaluators may be utilized.

d. Crew and individual performance is evaluated using, "Performance Competencies and the Competency Rating Key."

e. The competency matrix provides a standard format for the instructor or evaluator to use in developing a critique plan.

f. Task Areas

1. Consistency in identifying, coaching, and critiquing crew and operator performance is accomplished through the consistent delivery of training.

2. The following simulator task areas describe the training delivery requirements for simulator instructors:

   - Prepare to conduct simulator training
   - Conduct simulator training
   - Prepare to critique
   - Critique

g. Prepare to Conduct Simulator Session

The following guidance aids the instructor when preparing to conduct simulator training:

1	Review Lesson Guide	When an instructor is preparing to conduct training for the first time on a lesson, the instructor should: • review the lesson to gain an understanding of how/where each objective is met, including specified instructor intervention points, • get a "feel" for the content and flow of the lesson (i.e., what the major events are and in what order they will occur, any critical tasks, etc.).
2	Review Procedures, Anticipated Flowpath, and Background Documents	• Determine the flowpath and try to anticipate where problems might arise based on previous experience. • Review the background documents for difficult steps, steps which are known to have presented problems in previous sessions, or steps/procedures which are unfamiliar. • While reviewing the procedure flowpath, anticipate operator questions/concerns, and review the background material necessary to provide a solid explanation.

3	Identify Competency/Event Correlation	• Review the competency areas. • Certain competencies may be addressed to a higher degree by specific events. If this applies, the instructor should be prepared to pay extra attention to these areas during the events noted. • High attention overall should be placed on crew process competencies (communications, team skills, and diagnostics).
4	Anticipate Potential Operator Actions, Manipulations, and Problems to Determine Best Observer Strategy	• Determine which position(s) (i.e., SS, SFM, SCO, CO, etc.) will be most heavily tasked during the various events and determine the best location(s) for observing. • If certain steps in the procedure(s) are known to have been problem areas in the past, select the best location to observe the performance of these steps.
5	Be Cognizant of Plant Status and Plant/Industry Events	• For Industry Events listed in the References, review the event write-up to gain an understanding of how the lessons learned apply. • Be continuously aware of plant conditions in Units 1 & 2 which could affect the applicability and progression of the scenario.

6	Make Copies of Procedures and Handouts for Floor and Critique Room	• Review AOPs and EOPs to be used and place copies in the OCT Procedure binders. • Have copies available on the simulator floor and in the critique room for instructor and student reference. • Fill in any necessary information and make copies of any required forms and documents. (e.g., STPs, ECPs, etc.) • Ensure adequate copies of Shift Turnover Sheets and LG Attachment 2s are available.
7	Review Previous Session Lesson Guide Attachment 2 Performance Data	• Assess strong performance and challenge areas to bring to the attention of the team and/or individuals. • Challenge areas may affect the evaluation of assigned positions (see details below).
8	Evaluate Assigned Positions	• If a significant challenge was previously shown by a team member at a specific position, consider placing him/her in that position for further evaluation. • Team member position assignments which were pre-designated by the Session Lead Instructor should be evaluated and concurred with by the SS or SFM (inform Session Lead Instructor of any changes). • Determine who will be the Lead Instructor.
9	Check Applicability of FILE "ANNUNREQ"	• ANNUNREQ should not be filed during tests or examinations. • Ensure ANNUNREQ will not negatively impact scenario if filed during training session.

h. Conduct Simulator Session

The following guidance aids the instructor when commencing simulator sessions:

1	Booth Operator Responsibilities	• Prepare to support the simulator scenario by reviewing the lesson guide. • Check lesson guide Attachment 1 and drill file, if applicable, for accuracy. • Ensure that "Simulator Setup" is performed. • Assume the role of all outside personnel/departments/agencies. • Input plant conditions (MALFs, LOAs, etc.) at the proper times. • Dedicate full time to activities which support the simulator scenario. • Maintain continuous communications with floor instructors. • Apprise floor instructor(s) of event timing, and applicable phone communications. • Keep a running log of calls, events, and plant condition changes, per video timeline. • Ensure proper video display for major actions/conditions as directed by lead instructor. • Perform scenario deviations (time line changes or scenario modifications) as requested by the lead instructor. • Apprise lead instructor of any tour groups that arrive/leave during the scenario. • Ensure timely feedback to crew upon requests for actions/information. • Initiate TFBs for simulator problems.

2	Conduct Crew Briefing and Turnover - Lead Instructor	• Inform crew of: ◆ team member position assignments (Control Room and NOs). ◆ plant support personnel. ◆ Instructor role (U-2 SFM, CRA, Interim Liaison Coordinator, etc.). • Inform crew of scenario type: training, or evaluation. • Perform the session brief: ◆ strengths and challenges from scenarios earlier in the week. ◆ simulator changes ◆ exam/test information • Conduct shift turnover by briefing crew on existing plant conditions: ◆ Status of U-1 ◆ Status of U-2 ◆ Equipment OOS/T.S. actions in effect ◆ Power history/core critical data ◆ Boron concentration ◆ Planned shift evolutions ◆ Status of personnel in containment

3	Maintain Realism - Instructors and Booth Operator	• Respond to shift turnover questions with information which could be supported by actual plant conditions. • Ensure time expenditure and feedback are consistent with expected plant responses. • Inform students if time compression is to be used. • Maintain watchstander names throughout the scenario. • Allow operators to control access to carpeted area in manner consistent with control room policy. • Refrain from any comments/actions on simulator anomalies and ensure operators address ALL conditions. • Ensure communications are directed to the proper role player. • Avoid use of term "Simulator" after turnover is conducted.
4	Observe and Document Student Actions - Instructors	• Be in the optimal position to observe expected operator actions. • Direct booth operator to ensure proper video display for major actions/conditions. • Follow along in extra set of reference procedures. • Observe assigned individual's actions relative to the Expected Operator Actions. • Document team actions relative to performance competencies. • Record time of key indications and significant operator activities. • Make comments and record observations based on Expected Operator Actions on LG Attachment 2 (include both individual and team).

5	Provide Instructor Intervention	• Provide technical input/instruction as pre-planned or deemed appropriate. • Maintain timeline to ensure completion of all scenario objectives. ♦ ALL objectives must be covered. ♦ If necessary additional simulator time should be scheduled to cover all the objectives. • Maintain flexibility toward managing unplanned implementation of legitimate alternate success paths. • During training scenarios, use simulator features, as deemed necessary by the lead instructor, to emphasize lesson objectives and facilitate student learning. ♦ REPLAY ♦ BACKTRACK • Use FREEZE when training is to take place for the crew. • Use FREEZE when students' attention is to be focused on discussions with the instructors. ♦ Make it clear to all students that simulator is in FREEZE. ♦ Give short turnover prior to returning to RUN. • Provide crew coaching as needed.
6	Maintain Etiquette - Instructors	• Keep SS/SFM informed of tour groups. • Conclude scenario on time to allow proper set-up time for next group. • Allow crew the responsibility to control the carpet area activities (e.g., simulator maintenance work, non-session instructor access to controls, human factors, license class, etc.). • Direct all non-control room personnel to observe the standard control room access policies. • Maintain professional demeanor on floor.

7	Document Procedure and Simulator Problems - Instructors and Booth Operator	• Note any simulator conditions that are NOT considered to be true plant responses (either from observation or crew feedback) and ensure a TFB is initiated. • Note any procedure problems identified and write an Action Request as appropriate: ♦ confusing wording. ♦ typos. ♦ enhancements to existing wording. • Inform the oncoming instructors of all identified problems.
8	Identify Lesson/Scenario Problems - Booth Operator	• Note all scenario/lesson problems. • Identify any lesson problems in the red-line master copy located in the Instructor's Booth, and ensure this is forwarded to the Session Lead Instructor for revision of the lesson guide.
9	Provide Scenario Closure (Simulator Frozen) - Lead Instructor	• Inform crew of next activities and room numbers
10	Simulator Cleanups - Booth Operator	• Return all material to its proper place/position. • Collect and/or dispose of all notes/turnover sheets. • Assist on-coming instructors with simulator setups. • Ensure booth is left in good condition. • Release simulator for next session.

i. Prepare for Critique

Operations management in the crew group is selected as the critique facilitator. The critique facilitator should be, in order of preference:

- Operations Director
- Operations Management
  - Crew Shift Supervisor
  - Senior Operations Management Team member

The following should be used by the Critique Facilitator when preparing for a critique:

1	Review Observation Tools for Critiquable Items	• Review notes on Lesson Guide Attachment 2 by Event. • Evaluate Critiquable Items flagged during observation. • Identify additional Critiquable Items. • Substantiate Evaluation by reviewing Reference Material if necessary: ♦ OP1.DC11 and OP1.DC12 ♦ Technical Specifications. ♦ Final Safety Analysis Report. ♦ Procedures. ♦ Background Documents. ♦ Operations Department Policies. ♦ General Operating Orders.
2	Prioritize Events and Competencies	• Lead Instructor should: ♦ Discuss observations for each event with facilitator. Agreement of high priority critique items must occur. ♦ Discuss recommended competency ratings with the critique facilitator, revising ratings as needed. ♦ Record Ratings in Competency Matrix. ♦ Compute Competency and Event Averages. ♦ Record the lowest Competency Rating for each Event. ♦ Determine the Time Budget estimates. ♦ Identify as Mandatory Critiquable Items any Event Competency Ratings ≤2.

3	Review the Video	• Identify as possible Critiquable Items any sequences which: ♦ Demonstrate positive results of successful Competency performance. ♦ Allow self-critiquing of Competency performance relative to applicable standards. ♦ Allow clarification of procedure usage: + Transitions. + Step interpretation. + Missed steps or RNOs. • Determine at least one anchor point for indexing, in case a question arises during the Critique. • Determine start and stop points for each identified video sequence.

4	Review Objectives	• Identify as Critiquable Items any Lesson Objectives observed as weak during Crew performance of Scenario.
5	Facilitator Critique Plan	• Determine if Team or Individual performance warrants more Critique time than is allotted and develop action plan accordingly. • Organize Critiquable Items: ♦ Generate chronologically ordered Critique Plan by highlighting LG Attachment 2 or consolidating comments on separate paper. ♦ Link video sequences with Critiquable Items and record start/stop points on Critique Plan. • Flag the high priority Critiquable Items: ♦ Mandatory Critiquable Items. ♦ Good performance should be emphasized by considering at least one significant positive item (ideally to be used as part of the Introduction and the Closure). ♦ Other significant items. • Flag Emphasis Competencies (those competencies you wish to stress). • Transcribe Time Budget allocations to the Critique Plan.

6	Prepare Critique Room	• Verify resource material available, as necessary: ♦ Set of Controlled Reference Books. ♦ Session-specific Reference Books. ♦ VCR and Monitor. ♦ Overhead Projector.

j. Critique

Lead Facilitator should use the following guidance during a critique:

1	Review Critique Objective	• Prior to the first critique of the week, review the objective of the Critique period: The objective of the critique is to have the team complete an in-depth self-evaluation of team performance during the Simulator Scenario to identify lessons learned which can be used to optimize team performance should a similar event occur in the plant.
2	Convey Evaluation Results	• For an Evaluation scenario, convey team and individual examination results (Pass/Fail) to the crew.

3	Implement Critique Plan	• Maintain a progressive list of strengths, challenges, and Action Items to support future training. • Facilitate Crew review of scenario (facilitated self critique methodology): ♦ Interject with facilitative questions to promote crew member involvement and to allow for critique timeline/objective coverage. ♦ As strengths and challenges are identified, ensure crew white board is updated. **NOTE:** When the facilitated self critique methodology would not allow completion of the critique plan, the critique facilitator may inform the crew accordingly and utilize the directed critique methodology. • Manage Critique timeline: ♦ Maintain discussion within time constraints, if possible ♦ Ensure coverage of high priority critiquable items. • Show video sequences to support observations and reinforce strengths. Distribute Handouts, if applicable.

4	Critique Closure	• Review Lesson Objectives. • Ensure all closure action items are assigned. • Finalize the Post-Critique Summary on the white board: ♦ Strengths and challenges are complete. ♦ Crew Composition. • Make copies for the next day's group instructor and the program file. • Review the Schedule. • Ensure room is suitable for next critique.

5.5.4 **Additional Session Instructions**

Item	Description
First Run	The First Run determines the usability of the training materials under intended conditions and validates the revisions made to the materials during the technical review and small group evaluations. It is understood that small group evaluations may not be necessary or feasible for all lessons.
Supervised Self-Study	Supervised self-study consists of scheduled periods designed for the student to review the following: • D-CRIER • EOP Self-Study package • Lesson material An instructor will be available for student questions.
In-Plant Training	Examples of in-plant training are: • EOP Local Operator Action Walk-Downs • JPMs • System walk-downs

<table>
<tr><th>Item</th><th colspan="2">Description (Continued)</th></tr>
<tr><td>Pass/Fail Criteria</td><td colspan="2">The following is the Operator Continuing Training Program Pass/Fail criteria for written, JPM, and simulator tests.
• The minimum criterion for passing a written test is 80%.
• The minimum criterion for passing the JPM test, or the JPM portion of an exam is 80%. This means that the student must pass 80% of the JPMs administered.
• The minimum criteria for passing the simulator test is successfully accomplishing all Critical Tasks and achieving satisfactory results (a 2 or higher rating) on the performance competency evaluation.
When Operations Line Management evaluates crew performance, a LG Attachment 2 form shall be used to document team performance. The Operations Line Management qualified evaluator shall determine Team Pass/Fail results. Otherwise, the team evaluation is performed by the Lead Instructor.</td></tr>
<tr><td>Results of Failures</td><td colspan="2">The actions taken for individual failures shall be in accordance with TQ2.ID4. Additional guidance for failures is provided below:</td></tr>
<tr><td></td><td>IF...</td><td>THEN...</td></tr>
<tr><td></td><td>A simulator team fails</td><td>The members of the team shall have their qualifications revoked until successful completion of the remediation plan and re-examination. Immediately notify the crew Shift Supervisor or appropriate line management.</td></tr>
<tr><td></td><td>Any individual fails a written, JPM or simulator test.</td><td>All qualifications shall be immediately revoked until successful completion of the remediation plan and re-examination. Immediately notify the crew Shift Supervisor or appropriate line management.</td></tr>
</table>

Item	Description (Continued)
Remediation	The remediation shall be in accordance with TQ2.ID4.

5.6 Prepare an Attendance Tracking Spreadsheet

5.6.1 Purpose

The purpose of the Tracking Spreadsheet is easy identification of any individual whose attendance, assignment completion, or performance is marginal or unsatisfactory.

5.6.2 Contents

The Tracking Spreadsheet should contain the following information:

- Lessons an individual did not attend
- Quizzes, tests, or exams that an individual failed or did not take
- Failing grade averages

5.6.3 Procedure

The Session Leader should:

Step	Action
1	Obtain the appropriate spreadsheet from the appropriate network drive
2	Enter appropriate data into the spreadsheet
3	Save an electronic copy of the spreadsheet back to the appropriate network drive

5.6.4 Output

The Learning Leader shall:

Step	Action
1	Place a hard copy of the spreadsheet into the appropriate program file

5.7 Personnel Who Miss Training

5.7.1 In addition to the guidance provided in TQ2.ID4, students who miss Operator Continuing Training should complete the training within 6 weeks of the end of the session in which training was missed.

5.7.2 Students who have not completed the missed training within the 6 weeks shall have their qualifications removed and placed in a formal remediation program.

5.8 Exam Activities

5.8.1 Exam Bank

a. Purpose

The purpose of the Operator Continuing Training Program Exam Bank is to provide a set of validated examination material for use in creating tests and examinations. This applies to the Licensed Operator Training Program unless specifically noted.

b. Description

The exam bank consists of a written question bank which includes a Part "A" question exam bank and a Part "B" question exam bank, a JPM exam bank, and a Dynamic Simulator Scenario exam bank.

- The Part "A" question exam bank covers Systems topics identified as Duty Areas in the Sample and Exam Plan databases.
- The Part "B" question exam bank covers procedural topics identified as such in the Sample and Exam Plan databases.
- The JPM exam bank covers those analyzed procedural tasks which are Important to Safety and are identified in the procedural topic areas in the Sample and Exam Plan databases.
- The Dynamic Simulator Scenario exam bank provides a comprehensive evaluation of the integrated plant knowledge and skills (tasks) required of operating crews. The procedural tasks are identified in the procedural topic areas in the Sample and Exam Plan databases.
- The entire exam bank is considered "open" and available for operators to review.

c. The written bank includes a Part "A" and a Part "B" exam bank. Each bank shall consist of at least 350 validated questions, updated by reviewing, revising, or creating 150 questions each year.

d. The JPM exam bank shall consist of at least 130 JPMs.

e. The Dynamic Simulator Scenario exam bank shall consist of a sufficient number of scenarios to evaluate all DCPP site specific identified crew critical tasks.

5.8.2 Exam Bank Maintenance

a. The purpose of Exam Bank Maintenance is to provide instructions for maintaining a bank of validated exam materials for the Operator Continuing Training Program.

b. The exam materials for Operator Continuing Training shall be maintained in accordance with TQ2.ID3 and TQ2.ID4.

c. The following items shall be addressed in order to keep the Exam Bank current:

Item	Description
Revisions	The following sources shall be used for revision of Exam Bank materials: • TIPS • Procedure changes • Student feedback
Validation	Exam item validation shall be completed as follows: • New or revised exam items shall be written in accordance with TQ2.ID3 • Each new or revised exam item shall be validated in accordance with ACAD 90-002, ES-602, ES-603, and ES-604.
Incorporation	After the revision and validation process is completed, the exam items shall be incorporated into the appropriate exam bank.
Simulator Changes	Simulator modeling changes (except for repairs) shall be suspended from the time Biennial or Annual Exam Bank validation commences until all Exams are completed.

5.8.3 Prepare an Exam Plan Database

a. The purpose of an Exam Bank database is to provide examination material necessary to create an Exam Plan. The purpose of an Exam Plan is to create a comprehensive examination which places a similar level of emphasis as found in the Sample Plan topic areas.

b. The Exam Plan database consists of a dynamic simulator, JPM, Part A, and Part B spreadsheet. Each spreadsheet contains the same headings found in the Sample Plan with the following exceptions:

- The Exam Plan uses test item designators in place of lesson names.
- Instead of weighting by percentage of time spent on training, each test item is weighted by percentage of exam content.

c. The following instructions shall be used for entering data into an Exam Plan database:

Step	Action
1	Open the Sample Plan.
2	Copy and paste the Sample Plan topic area percentages into the Exam Plan.
3	Build the exam by placing a "1" next to the item designator, then press the enter key to include that item in the exam.

5.8.4 Prepare for Operator Continuing Training Exams

a. The purpose of "Prepare for Operator Continuing Training Exams" is to provide instructions for preparing Annual Operational Exams and Biennial Exams. The overall exam strategy comes from the Sample Plan. The qualitative attributes associated with all the examination material used to create the exams constitute the Exam Plan.

b. The instructor shall prepare Operator Continuing Training Biennial and Operating Exams in accordance with TQ2.ID4.

c. The instructor shall use the following additional guidance when preparing Operator Continuing Training Biennial and Operating Exams. The following table describes the two types of Operator Continuing Training exams:

Item	Description
Annual Operational Exam	The Annual Operational Exam consists of: • At least two dynamic simulator scenarios • Five JPMs
Biennial Exam	The Biennial Exam consists of: • An operational exam • Written exam ◆ Twenty Part A written test questions ◆ Twenty Part B written test questions The exam is weighted as follows: • Dynamic Simulator - 40% (total) • JPM - 20% (4% per JPM) • Written - 40% (1% per question)

d. The following table states the rules for building an exam:

Item	Description
Examination Rules	The following is a list of examination rules: • No more than 25% of the exam items may be used more than once. No one exam item may be used on more than three exams. • Ensure the Exam Plan topic area emphasis is consistent with the Sample Plan. ♦ Ensure topic areas in the Sample Plan that have at least 10% coverage are evaluated in the Exam Plan. ♦ Attempt to keep Duty Areas/AOP/EOP ratios consistent with the Sample Plan. ♦ Do not exceed any topic area by more than 5% of the Sample Plan value. This does not apply to EOP E-0 because it is the most frequently used Emergency Operating Procedure and provides the necessary diagnostics for entry into the other Emergency Operating Procedures.
NLO JPM Examination Rules	Non-licensed Operators shall be evaluated as follows: • The NLO exam shall consist of five in-plant JPMs. ♦ At least three of the JPMs shall cover tasks taught during the continuing training year. ♦ Up to two of the JPMs may cover topics which were not taught during the continuing training year • The use of a sample plan for NLO examination creation is not required. ♦ There is no requirement for a minimum number of area specific JPMs (such as RCA).

STA Examination Rules	The STA shall be evaluated as follows: • SRO licensed STAs shall receive separate SRO and STA exams • The STA exam shall consist of: ♦ Two simulator scenarios at the STA position ♦ Five STA designated JPMs ♦ A written exam (the written exam requirement is considered met if the STA successfully passes the SRO written exam)
Dynamic Simulator Spreadsheet	The chosen dynamic simulator scenarios set should meet the quantitative attributes found in ES-604-1.
JPM Spreadsheet	The following is a list of JPM rules: • At least two of the five JPMs shall be control room JPMs. • At least two of the five JPMs shall be in-plant JPMs. • At least one of the in-plant JPMs shall be in the Radiation Controls Area of the plant.
Part A and Part B Spreadsheets	The following is a list of Part A/Part B rules: • Do not exceed Sample Plan topic area values by greater than 1% using test questions. • The test questions used for ROs shall be greater than or equal to a rating of 2.5. • The test questions used for SROs shall be greater than or equal to a rating of 3.0.

Post Creation Evaluation	Once the examination is built, the following qualitative attributes shall be evaluated: • For biennial exams, 10% to 20% of the exam shall address topic area subjects not covered during the Continuing Training Cycle. Some topic areas contain more than one subject (such as the Emergency Plan). • For annual operational exams, at least 50% of the exam shall address topic areas covered during simulator and in-plant training given in the last Operator Continuing Training year. • Ensure there is no duplication of evaluation between Critical Tasks and: ◆ Other Critical Tasks ◆ JPMs ◆ Written test questions
Exam Security	Exam security shall be in accordance with TQ2.ID4.

e. The following steps shall be used for building an exam:

Step	Action
1	Follow the instructions in "Prepare an Exam Plan Database."
2	Select dynamic simulator scenarios.
3	Perform the quantitative checks required by ES-604.
4	Select five JPMs. NOTE: The first consideration for JPM selection should be in topic areas covered in the Sample Plan, but not evaluated in the dynamic simulator scenarios. Then JPMs are selected in topic areas so that they will not exceed the Sample Plan by more than 5%.
5 *	Select 20 Part A exam questions. NOTE: The first consideration for question selection should be in topic areas covered in the Sample Plan, but not evaluated in either the dynamic simulator scenarios or JPMs. Then questions are selected in topic areas so that they will not exceed the Sample Plan by more than 1%.

6	*	Select 20 Part B exam questions. NOTE: The first consideration for question selection should be in topic areas covered in the Sample Plan, but not evaluated in either the dynamic simulator scenarios or JPMs. Then, questions are selected to insure 10% to 20% of the examination evaluates topic areas not covered in the sample plan. Finally, questions are selected in topic areas so that they will not exceed the Sample Plan by more than 1%.
7		Perform a post creation evaluation of the qualitative attributes.

* For Biennial Exams only

8	Create individual student examination cover sheets. The cover sheets shall contain the following items: • Student name • Date of Exam • Dynamic Simulator Scenarios used, overall Simulator portion Pass/Fail grade, and performance review • JPMs used, JPM score (in percent), JPM Pass/Fail grade, and performance review • Written test score, Written Test Pass/Fail grade, and performance review • Overall Examination Pass/Fail grade • Signature blocks for Training Leader; Director, Learning Services; and Director, Operations

5.8.5 Conduct Operator Continuing Training Exams

a. The purpose of "Conduct Operator Continuing Training Exams" is to provide instructions for conducting Biennial and Annual Operational exams.

b. The instructor shall conduct Operator Continuing Training exams in accordance with TQ2.ID4.

c. Exam security shall be maintained at a level to preclude the potential for compromise of the integrity of any portion of the exam, with the following requirements:

- If identical exams are given to successive groups, the two groups shall be separated from each other from the time the first exam is started until the last exam is completed.
- After a student has completed the exam, the student will be asked to maintain separation, or if plant conditions require, sign the exam security agreement.

Item	Description
Separation	Separation shall be accomplished by any of the following methods: • One group is maintained in a building or area that is physically separated from the exam area. • One group is maintained off plant site while the other group is taking the exam. • If both groups are in the same building, one of the groups shall be sequestered by use of a proctor to ensure no contact is made with the other group.
Sequestering	Sequestering is defined as using a proctor to separate two or more groups of students taking an exam. The following personnel may be utilized as a proctor for sequestering: • Security personnel • Instructors • A first-line supervisor who is not taking the exam

Security Agreement	A security agreement is defined as: • A formal agreement stating the individual has acquired information about the exam and agrees not to divulge it. • The number of persons having to sign the security agreement shall be minimized. This is to be accomplished by limiting the number of people on the exam development and evaluation team.

d. The following steps shall be performed during a written exam:

Step	Action
1	Obtain Exam material from the Session Leader.
2	Set a room up in the following manner. • A single room shall be utilized. • A supporting rest room facility shall be available only to the students taking the exam. • Only one student is allowed in the rest room at one time. • The students shall maintain at least three feet of separation from other students taking an exam.
3	Remove all unnecessary items from the room.
4	Ensure that the designated restroom facility has been inspected and that a proctor is available.
5	Pre-brief the students with applicable portions of ES-602, Attachment 1, "Policies and Guidelines for Taking NRC Written Examinations."
6	Handout bubble answer sheets and exams.
7	Present start and stop times for the written exam.
8	Perform post-exam test item performance review with student.
9	Return graded bubble answer sheets to the Session Leader.

e. The following steps shall be performed during a simulator exam:

Step	Action
1	Obtain Exam material from lead instructor.
2	Remove all unnecessary items from the simulator.
3	Ensure all instructors have the materials necessary to evaluate the students.
4	Ensure the simulator is set up in accordance with TQ2.ID4.
5	Pre-brief the students with applicable portions of ES-604, Attachment 2, "Dynamic Simulator Briefing Checklist."
6	Assign student positions.
7	Provide a shift turnover and time for board walkdowns.
8	When the assigned Shift Supervisor declares that the walkdowns are complete and the crew has assumed the watch, commence the simulator session in accordance with Attachments 1 and 2 of the scenario lesson guide.
9	At the completion of each scenario, applicable individual crew members are held over for instructor follow-up questions then sent out with the rest of the crew. Separation must be maintained.
10	At the completion of each scenario, the evaluators caucus to identify critical tasks that were omitted, incorrectly performed, or created during the performance of the crew.
11	At the end of the simulator exam, the evaluators caucus to determine individual and team Pass/Fail.
12	Prepares for the crew critique in accordance with Section 5.5.3.j. of this procedure.
13	Performs a critique in accordance with Section 5.5.3.k. of this procedure.
14	The lead instructor routes the evaluation documentation to the session leader to complete the review and approval process in accordance with TQ2.ID6.

f. The following steps shall be performed during a JPM exam:

Step	Action
1	Obtain exam material from the session leader.
2	Ensure all necessary material to perform the JPMs is contained in the JPM package.
3	Ensure simulator set up is completed per Attachment 1 of the JPM Lesson Guide.
4	Instructor escorts scheduled student from the sequestered area.
5	Instructor performs pre-brief with student.
6	Instructor evaluates student performance during the JPMs and determines individual and overall JPM Pass/Fail.
7	Conduct post-exam JPM performance review with student.
8	The instructor routes the evaluation documentation to the session leader to complete the review and approval process in accordance with TQ2.ID6.

g. Pass/Fail Criteria

The following shall be the Operator Continuing Training Program Pass/Fail criteria for written, JPM, and simulator exams:

• The minimum criterion for passing the written portion of the examination is 80%.
• The minimum criterion for passing the JPM portion of the exam is 80%. This means that the student must pass 80% of the JPMs administered.
• The minimum criteria for passing the simulator portion of the exam is successfully accomplishing all Critical Tasks and achieving satisfactory results (a 2 or higher rating) on the performance competency evaluation.
• When Operations Line Management evaluates crew performance, a LG Attachment 2 form shall be used to document team performance. The Operations Line Management evaluator shall determine Team Pass/Fail results. Otherwise, the team evaluation is performed by the Lead Instructor.

h. Results of Failures

The actions taken for individual failures shall be in accordance with TQ2.ID4. Additional guidance for simulator failures is provided below:

IF...	THEN...
A simulator team fails an exam	The members of the team shall have their qualifications revoked until successful completion of the remediation plan and re-examination. Immediately notify the crew Shift Supervisor or appropriate line management.
Any individual fails written, JPM, or simulator exam	All qualifications shall be immediately revoked until successful completion of the remediation plan and re-examination. Immediately notify the crew Shift Supervisor or appropriate line management.

i. Remediation

The remediation policy shall be in accordance with TQ2.ID4. The qualitative content of the remediation package does not have to meet the sample plan.

6. RECORDS

All records shall be maintained in accordance with TQ2.ID6.

7. REFERENCES

7.1 10 CFR 55, Operator Licenses.

7.2 ANSI N18.1/1971, Selection and Training of Nuclear Power Plant Personnel.

8. SPONSOR

Roger Jett