Pacific Gas and Electric Company

Diablo Canyon Power Plant
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March 5, 2003

PG&E Letter DCL-03-024

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Docket No. 50-275, OL-DPR-80
Docket No. 50-323, OL-DPR-82
Diablo Canyon Units 1 and 2
Emergency Plan Implementing Procedure Update

Dear Commissioners and Staff:

In accordance with Section V, "Implementing Procedures," of 10 CFR 50, Appendix E, enclosed is an update to the emergency plan (EP) implementing procedures for Diablo Canyon Power Plant, Units 1 and 2.

As provided under 10 CFR 50.54(q), the changes have been made without prior NRC approval since they do not decrease the effectiveness of the EP. The EP, as changed, continues to meet the standards of 10 CFR 50.47(b) and 10 CFR 50, Appendix E.

This update contains privacy/proprietary information that has been bracketed in accordance with NRC Generic Letter 81-27.

If there are any questions regarding this update, please contact Mr. Mark Lemke of my staff at (805) 545-4787.

Sincerely,

Grant C. Gillies
Director, Site Services

ddm/1345
Enclosures
cc: David L. Proulx
Girija S. Shukla
cc/enc: Senior Emergency Preparedness Inspector (RGN-IV/DRS)

A045

LOCATION OF PRIVACY/PROPRIETARY INFORMATION IN EMERGENCY PLAN IMPLEMENTING PROCEDURES FOR DIABLO CANYON POWER PLANT, UNITS 1 AND 2

Procedure Number	Privacy/ Proprietary Information	Title/Location of Privacy/Proprietary Information
OM10.ID3, Revision 6A	No	Emergency Planning Training
OM10.DC1, Revision 2A	No	Emergency Preparedness Drills and Exercises
EP G-2, Revision 26	Yes	Interim Emergency Response Organization Attachment 6.3 – page 1 Attachment 6.5 – page 1 Attachment 6.6 – page 1
EP G-3, Revision 40	No	Emergency Notification of Off-Site Agencies
EP EF-1, Revision 30	Yes	Activation and Operation of the Technical Support Center Attachment 6.5 - page 1 Attachment 6.20 - page 1

DIABLO CANYON POWER PLANT EMERGENCY PLAN IMPLEMENTING PROCEDURES

Table of Contents - Emergency Plan Implementing Procedures
Volume 1A (OM10.ID3 only), Volume 1B (OM10.DC1 only), and Volume 3B

*** Procedure included in this submittal**

TITLE: Emergency Planning Training

02/24/03
EFFECTIVE DATE

PROCEDURE CLASSIFICATION: QUALITY RELATED
SPONSORING ORGANIZATION: EMERGENCY PLANNING
REVIEW LEVEL: "A"

1. SCOPE

   1.1 This procedure provides direction for the administration of the Radiological Emergency Plan Training Program as defined in the Emergency Plan, Section 8.

   1.2 Also included in this procedure is the use of the Program Description (PD).

2. DISCUSSION

   Various courses are offered at the plant to satisfy the radiological emergency plan training program requirements. This procedure provides direction for the administration of the training program and the PD.

3. RESPONSIBILITIES

   3.1 The emergency plan training leader is responsible to the emergency plan supervisor for the development of course material, the scheduling, coordination and maintenance of lesson content, the instruction of emergency planning material, and the assignment of emergency training requirements to personnel.

   3.2 The course subject matter expert is responsible for technical review of all course material, and individual training requirement suitability.

   3.3 The supervisor, emergency planning is responsible for final approval for lesson guides and the PD associated with the Emergency Plan Training Program and approving the Emergency Plan Training Recall Roster.

   3.4 The plant support director is responsible for administration of the overall Emergency Planning Training Program and the annual review of the PD.

4. INSTRUCTIONS

4.1 Courses

4.1.1 There are two courses that comprise the Radiological Emergency Plan Training Program:

a. Basic Radiological Emergency Plan Training

1. Basic course, designed to introduce Emergency Response Organization (ERO) personnel to emergency preparedness and response.

2. Required training for all company plant staff personnel.

b. Advanced Radiological Emergency Plan Training

1. Advanced, task specific training, designed to provide personnel with the skills/knowledge required for the performance of emergency response tasks.

2. Required for personnel assigned to specific emergency response organization positions.

3. Specific requirements for emergency response organization personnel are listed in the PD.

4.1.2 A complete list of Emergency Plan-Diablo (EPD) lessons offered is in the PD.

4.1.3 Basic descriptions of each lesson are in the PD.

4.2 Initial Qualification and Requalification Requirements

4.2.1 The PD lists the basic lesson descriptions and the requalification requirements for each lesson.

4.2.2 Initial training can be accomplished through satisfactory completion of a classroom course, Self Paced lessons or Computer Based Training (CBT) The EP Supervisor will ensure the proper training materials and methods are used before the training will be credited for the individual.

4.2.3 Personnel, newly hired, or for whom radiological emergency plan training requirements are changed, must be trained for the position they are assigned, prior to being placed in the Emergency Response Organization.

a. Personnel shall not be placed on the "Emergency Organization On Call Listing" who have not completed their initial or requalification Emergency Plan training.

4.2.4 For personnel assigned to specific emergency response organization positions, access to the plant protected area is contingent upon satisfactory completion of required initial and requalification training.

a. Personnel shall be removed from the ERO who have not completed their requalification Emergency Plan training.

4.2.5 Some specialized course material may be developed by individual training groups, such as chemistry or radiation protection. An EPD course number will also be used when these courses are taught to ensure that emergency plan training requalification requirements are met.

4.2.6 Requalification

a. Lessons for which requalification is required should be done on an annual (12 month) basis and shall be done no later than 15 months after the last training was accomplished.

b. To prevent exceeding the 15 month time period, protected area access will automatically be denied to any individual who exceeds 13 months from previous training. The Supervisor, Emergency Planning or designee may extend this period to 15 months for special circumstances.

c. Participation in an evaluated drill or exercise may satisfy requalification requirements, provided that Job Performance Measures (JPMs) are completed and documented in accordance with OM10.DC1.

d. Requalification may be accomplished through satisfactory completion of a self-paced lesson or lessons meeting course completion requirements.

e. Oral exams may be administered in lieu of written exams, in accordance with TQ1.ID5.

f. Computer based training may be used in lieu of classroom attendance for some courses.

g. Drill Controllers may receive credit for drill participation and overview of the facility to which controller responsibilities were assigned.

4.2.7 All personnel that are included in the ERO will have a course beginning with "EPP" assigned to them. This course will be tracked in PIMS to determine when an individual needs to participate in a drill or exercise. Newly assigned personnel shall be required to participate in a drill within 12 months, or shall be removed from the ERO. Those persons exceeding 36 months since their last drill participation shall be required to participate or observe in the next drill in which their position is activated, or shall be removed from the ERO.

4.3 Computer Based Training

4.3.1 Computer Based Training (CBT) may be used in lieu of classroom attendance for some initial and requal courses. CBT should not be used for classes involving practical demonstrations such as Radio Console Operation. An exam will be presented at the end of each lesson.

4.3.2 New and Revised CBT Lessons:

a. New and revised CBT lessons will be reviewed by the lesson guide author or subject matter expert to verify that the content or intent of the approved lesson guide has been properly uploaded to CBT.

b. A lesson guide history sheet for CBT modules will be generated and signed by the lesson guide author or subject matter expert prior to the CBT lesson going on line. Minor changes which do not affect the lesson content or intent (e.g., typos, spellings, things which do not affect the objectives or test items) can be corrected without generating a CBT lesson guide history sheet.

c. CBT Lesson guide history sheets will reside with the master lesson guides with copies being sent to the Training Records Clerk for entry into the Records Management System (RMS).

d. The following information will be included on the Lesson guide history sheet for CBT.

- lesson title and lesson number
- lesson revision number and date
- name of author
- name and signature of CBT verifier
- date of CBT verification

4.3.3 Exam controls for CBT:

a. All personnel are responsible to complete the **testing portion of CBT** without coaching or outside help.

b. Personnel engaged in helping or coaching others during the **testing portion of CBT** are subject to disciplinary action.

4.3.4 CBT Examination Results:

a. When CBT produces completed test scores (other than zero) the test scores are entered into PIMS.

b. If an exam score from CBT shows as a zero (0) then a Emergency Plan supervisor's approval shall be obtained before it is entered.

1. Logic The nature of the CBT programs are such that "zero" scores might be the result of an incomplete CBT examination which can be caused by power failures, a computer lock-up or rebooting after testing has begun. A computer search can be made to determine how the affected student was performing up to the point when the failure occurred.

4.4 Lesson Completion Criteria

4.4.1 Lessons requiring a satisfactory grade on an exam to meet completion criteria are so identified in the PD.

4.4.2 Some lessons in the Specialized Radiological Emergency Plan Training Course require satisfactory demonstration of on-the-job tasks as criteria for lesson completion.

a. For lesson completion criteria, on-the-job tasks must be performed in accordance with a Job Performance Measure (JPM).

4.4.3 Failure to achieve the lesson completion criteria.

a. Personnel who fail to achieve classroom lesson completion criteria shall be allowed to retry only after appropriate remedial instruction (personalized, if resources permit, or retaking the lesson).

b. Personnel who fail to achieve CBT or self-paced lesson completion criteria must attend initial classroom training or receive personalized remedial instruction.

4.5 Feedback

4.5.1 As appropriate, radiological emergency plan training shall provide a means by which, trainee feedback and identification of deficiencies can be documented.

4.5.2 Improvement suggestions may be recorded on Form 69-10599, "Emergency Plan Improvement Item," (attached) or equivalent.

a. The suggestion should be submitted to the Supervisor, Emergency Planning.

4.5.3 Improvement suggestions may also be submitted to the employee suggestion program for consideration.

4.6 Emergency Plan Trainer

4.6.1 Training staff who perform as subject matter experts in the development, presentation, or evaluation of technical instruction should possess technical qualifications consistent with their assignments.

4.6.2 An interview with the Emergency Planning Supervisor must be completed prior to a person being assigned the position of Emergency Plan Trainer.

4.6.3 A trainer evaluation will be performed annually by the Supervisor, Emergency Planning for each Emergency Plan Trainer. The EP Supervisor will document each evaluation on an "Emergency Plan Trainer Evaluation" Form 69-20179, Attachment 7.2.

4.7 Development of a Program Description (PD)

4.7.1 Content of the PD:

- provides a listing of all EP training courses
- provides a course description for each listed course
- provides course qualification and requalification requirements for appropriate positions in the Emergency Response organization.

4.7.2 Instructions for developing a training PD

The information necessary to develop a PD for a training program should be a direct result of the analysis and design phases of SAT. The following instructions should be used to develop a PD.

Step	Action
1	Determine the time segments necessary to achieve the scope of lessons.
2	Identify the PIMS codes for each lesson.*
3	Add the PIMS codes to the PIMS triennial review schedule.*
* Initial training only.	

4.7.3 Instructions for revising a PD

Revising a PD consists of ensuring that program changes from the analysis and design phases are included in the next training course. The following instructions should be used for revising a PD.

Step	Action
1	Obtain and review TIPs assigned to the PD. **NOTE:** PD changes involving lesson titles, lesson sequence, objective title or objective assignments require updates to the program data in Access.
2	As necessary, make changes to the data in Access.
3	As necessary, revise the time segments to achieve the scope of lessons.
4	As necessary, add/delete the PIMS codes for each added/deleted lesson.
5	As necessary, add or delete the PIMS codes in the PIMS triennial review schedule.
6	Verify PD revision does not affect commitments.

4.7.4 Review and approval

The following review and approval steps should be used.

Step	Action
1	Ensure a cover sheet exists with the following items:
	• Program name • Course name and number • Topic name and number • PD title • PD revision number • Author's name and date • Review block for Training Leader signature and date • Review block for Supervisor, Emergency Planning, signature and date • Annual review block for Plant Support Director signature and date
2	Training leader reviews PD.
3	Supervisor, emergency planning approves PD.
4	Plant support director does an annual review of the PD.

5. RECORDS

Training records shall be maintained in accordance with TQ1.ID4. Training records shall be documented in a computer system which provides the capability of summarizing an individual's training.

6. APPENDICES

NONE

7. ATTACHMENTS

7.1 Form 69-10599, "Emergency Plan Improvement Item," 03/09/92

7.2 Form 69-20179, "Emergency Plan Trainer Evaluation," 04/20/99

8. REFERENCES

8.1 Diablo Canyon Power Plant Emergency Plan.

8.2 TQ1.ID4, "Non Accredited Training Records".

8.3 NUREG 0654, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants.

8.4 10 CFR 50, Appendix E, Emergency Planning and Preparedness for Production and Utilization Facilities.

8.5 TQ1.ID5, "Testing Control, Administration, and Documentation for Training."

8.6 STP PEP EN-1, "Plant Accident Mitigation Diagnostic Aids and Guidelines."

8.7 Emergency Planning Training Program of Instructions.

8.8 DCL-86-087

TITLE: Emergency Planning Training

Initiator: _____ Item No. _____ (By Emergency Planning)

Name _____ Date _____

Employer _____ Dept. _____

Position _____

or

Drill or Training Class Description/Date _____ / _____

Emergency Plan Area to which improvement item applies (i.e., training course, drills emergency facilities, equipment or procedures)

_____

Improvement Item _____

_____

_____

_____

_____

How would this improve our emergency response? _____

_____

Improvement item disposition [ ] AR No. _____

[ ] Action Initiator No. _____ [ ] other (describe) _____

Disposition by _____ Date _____

Indicate the item number to which comment(s) apply.

COMMENTS

Strengths: _____

Areas Needing Improvement: _____

Recommendations: _____

Instructor/Trainer Feedback: _____

NOTES

Pacific Gas & Electric Company
Nuclear Power Generation

Diablo Canyon Administrative Procedure

OM10.DC1
Rev. 2A

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Emergency Preparedness Drills and Exercises

02/20/03
Effective Date

Sponsoring Organization: Emergency Planning
Procedure Classification: Quality
Review Level: "A"

Table of Contents

1. SCOPE

This procedure provides administrative controls for the DCPP Emergency Plan drill and exercise program.

2. DISCUSSION

In the context of scheduling and development, drill and exercise may be used interchangeably within this procedure.

This procedure implements 10 CFR 50.47 (b) (14).

- Periodic exercises are conducted to evaluate emergency response capabilities.
- Periodic drills are conducted to develop and maintain key skills.
- Deficiencies identified as a result of exercises or drills are corrected.

More criteria is provided by 10 CFR 50, Appendix E, Section IV (F). Exercises shall:

- Test the adequacy of timing and content of implementing procedures and methods.
- Test emergency equipment and communications networks.
- Test the public notification system.
- Ensure that emergency organization personnel are familiar with their duties.

Federal regulations also specify biennial exercises with state and local government participation within the Plume Exposure Pathway Emergency Planning Zone (EPZ).

Scheduling of exercises involving state and local participation must be coordinated with the affected governmental agencies, the Nuclear Regulatory Commission (NRC) and the Federal Emergency Management Agency (FEMA).

3. DEFINITIONS

Annual
A calendar year beginning January 1 and ending December 31.

Controller
An individual that ensures the scenario proceeds in accordance with the timeline, disseminates information and pre-planned messages, observes and documents player performance and makes corrective action recommendations. Controllers should be technically qualified in the areas they are controlling and it is preferable to have controllers assigned to the Emergency Response Organization (ERO) position they are controlling.

Drill
A drill is a supervised instruction period aimed at testing, developing and maintaining skills in a particular operation. Drills may involve on-the-spot correction and may require demonstration of correct performance by the controller. Drills may be used to correct findings from an exercise.

Exercise
An event that tests the integrated capability and a major portion of the basic elements existing within emergency preparedness plans and organizations. An exercise is evaluated and requires documentation of problem areas.

Emergency Response Organization (ERO)
The organization specifically designed to supplement the normal plant organization during emergencies. This organization is established upon activation of the DCPP Emergency Plan and provides coordinated, comprehensive emergency response capabilities.

4. RESPONSIBILITIES

Station Director
Assuring emergency drills and exercises are scheduled as an integral part of plant operations.

Plant Support Director
Ensuring implementation of the DCPP Emergency Plan drill and exercise program.

Emergency Planning Supervisor

- Developing an annual drill and exercise schedule.
- Developing and conducting all required DCPP Emergency Plan drills and exercises.
- Implementing corrective actions identified during drills and exercises for the Onsite Emergency Preparedness program.
- Coordinating drill and exercise schedules and corrective actions with governmental agencies, offsite organizations and Corporate groups.

Drill and Exercise Coordinator
Preparation and conduct of the drill program, under the direction of Emergency Planning Supervision.

Safety and Fire Protection Group

- Scheduling, developing and conducting fire drills to meet FSAR 9.5H requirements.
- Coordinating participation by California Department of Forestry (CDF) in at least two drills annually.

5. INSTRUCTIONS

5.1 EMERGENCY RESPONSE DRILLS AND EXERCISES

5.1.1 Onsite Emergency Response Exercises

1) Onsite emergency response exercises **shall** be conducted every 2 years.

Note: The exercise may be included in the full participation biennial exercise.

2) Other drills **shall** be conducted during the interval between biennial exercises, including at least one drill that involves a combination of some of the principal functional areas of the onsite emergency response capabilities.

   a) The principal functional areas of emergency response include activities such as:

      - Management and coordination of emergency response.
      - Accident assessment.
      - Protective action decision-making.
      - Plant system repair and corrective actions.

   b) Activation of the Emergency Response Facilities is not required. Tabletop and training exercises may be conducted.

5.1.2 Offsite Emergency Response Exercises

1) Offsite emergency response exercises **shall** be conducted biennially with full participation by each offsite agency having a role under the plan.
   a) Emergency Planning **shall** coordinate with San Luis Obispo County Office of Emergency Services to verify County personnel and resources are adequate to respond to an emergency.

2) Ingestion pathway exercises **should** be conducted at least once every twelve years.
   a) The California Governor's Office of Emergency Services and the Department of Health Services **should** have full participation in these exercises.
   b) Emergency Planning **shall** assist with enabling any State or local Government agency located within the plume exposure pathway EPZ to participate drills when requested.

3) Scenarios **should** ensure sufficient opportunity to evaluate the Control Room (Simulator) Operators as stated in the exercise objectives.

5.1.3 Communications Drills

1) Communications with San Luis Obispo County Sheriff and California Office of Emergency Services response centers **shall** be tested monthly.

2) In accordance with STP I-29, telecommunications checks from the Control Room **shall** be conducted with the San Luis Obispo Sheriff's office and State OES on a weekly basis in addition to the communications drill.

3) Communications between the DCPP, EOF, State EOC, SLO County EOC and field assessment teams **shall** be tested annually during full-scale drills, to verify understanding of the content of messages.

5.1.4 Medical Emergency Drills

1) Medical emergency drills **shall** be conducted according to letters of agreement with each medical facility listed in the DCPP Emergency plan .

2) Drills involving a simulated contaminated individual who is transported from the plant to a medical facility **shall** be conducted annually.

5.1.5 Radiological Monitoring Drills

1) Radiological monitoring drills **shall** be conducted annually.

2) Radiological monitoring drills **shall** include collection and analysis of environmental samples and provisions for communication and record keeping.

5.1.6 Health Physics Drills

1) Health Physics Drills **shall** be conducted semi-annually involving response to and analysis of:
   - Simulated elevated airborne contamination.
   - Simulated contaminated liquid samples.
   - Direct radiation measurements in the environment.

2) Health Physics Drills may be conducted separately or as part of full scale drills or exercises.

5.2 SCENARIO DEVELOPMENT

5.2.1 Scenario Development Team

1) A Scenario Development Team **should** assist Emergency Planning, as necessary, to develop biennial exercise, dress rehearsals and training drill scenarios.

2) The following expertise should be included on the Scenario Development Team:

   Drill and Exercise Coordinator
   Responsible for the preparation and conduct of the drill program.

   Plant Operations Specialist
   Knowledgeable of plant systems, plant operations and simulator scenario development.

   Radiological Systems Specialist
   Knowledgeable of the plant radiological monitoring systems, plant chemistry, atmospheric dispersion modeling, and development of onsite and offsite field data.

   Emergency Planning Training Coordinator
   Responsible for training lesson plans and documentation.

5.2.2 Scenario Review Group

1) A Scenario Review Group **should** assist Emergency Planning, as necessary, to provide technical review of scenarios for biennial exercises, dress rehearsals and training drills.

2) The Scenario Review Group may consist of personnel with the following expertise:

   Operations Reviewer
   An independent reviewer to the Scenario Development Team Operations representative.

   Radiation Protection Reviewer
   An independent reviewer of scenario radiological data.

   Chemistry Reviewer
   Ensures that data is adequate and accurate if PASS or other sampling is to be conducted.

Security Reviewer
Ensure the conduct of the exercise will not result in Security problems.

Plant Emergency Planning Reviewer
Ensures the scenario meets onsite and offsite objectives.

Maintenance Reviewer
Determines where additional data may be needed to support maintenance functions.

Safety Group Reviewer
Reviews the scenario for fire, emergency medical, and safety issues.

Offsite Agency Representative
State, Federal and local agencies may be asked to review scenarios to ensure scenario design is adequate to support their drill objectives.

5.3 DRILL AND EXERCISE SCHEDULE

1) An annual drill and exercise schedule **should** be developed prior to January 1 of the schedule year.

2) The annual drill and exercise schedule **should** be coordinated and approved by:
   - Plant management.
   - San Luis Obispo County Office of Emergency Services.
   - Governor's Office of Emergency Services.

3) Scheduling of the biennial exercise **should** be coordinated with:
   - Region IV utilities.
   - Nuclear Regulatory Commission.
   - Federal Emergency Management Agency.

5.4 EXERCISE SUBMITTAL

1) Biennial exercise objectives **shall** be submitted to FEMA 90 days prior to the exercise.

2) The complete scenario package **shall** be submitted to FEMA at least 60 days prior to the exercise for review.

3) The table below lists milestones that **should** be achieved prior to a biennial exercise.

Biennial Exercise Development Milestones

Days prior to Exercise	Activity
180	Organizations determine extent of play to support commitments.
180	Extent of play for all organizations is defined and agreed to by all parties.
180-150	Development of objectives and potential scenarios.
150	Exercise objectives are approved by all organizations. Scenario is selected.
150-135	Exercise timeline is developed
135	Exercise timeline is approved.
135	Players and controllers are selected for the exercise.
135-90	Exercise package is developed and reviewed by the Scenario Review Group.
100	Letters of transmittal (NRC, FEMA) are prepared.
90	Initial draft of scenario is submitted to regulatory agencies.
90-60	Organizations review the exercise scenario.
60	Final draft of the exercise scenario is submitted to regulatory agencies.
60	Logistical support for the exercise is initiated.
45	Regulatory agencies provide summary exercise review comments.
<10	Conduct controller briefing
<10	Inspect facilities and emergency equipment
<10	Verify player lists.

5.5 DRILL AND EXERCISE CRITIQUES

Formal critiques **shall** be conducted following all drills and exercises in order to identify weak or deficient areas that need correction.

1) Critiques **should** be performed at each facility at the conclusion of the drill or exercise.

2) Any weaknesses or deficiencies that are identified **should** be corrected.

5.6 REMEDIAL EXERCISES

1) Remedial exercises may be required if the NRC, in consultation with FEMA, determines that a biennial exercise has not demonstrated that adequate protective measures can be taken in the event of a radiological emergency.

2) The extent of State and local participation in remedial exercises **should** be sufficient to demonstrate that appropriate corrective actions have been taken regarding the elements of the plan not properly tested in the previous exercises.

5.7 REPORTS

Drill reports **shall** be prepared and include:

- Drill attendance.
- Objectives.
- Required remedial actions.

5.8 CORRECTIVE ACTION TRACKING

Corrective Actions identified during drills or exercises shall be tracked using:

- Action Requests, if the issue meets the problem criteria of OM7.ID1.
- EPIC, at the discretion of Emergency Planning.

5.9 EMERGENCY RESPONSE ORGANIZATION DRILL AND EXERCISE PARTICIPATION

1) Drill participants **should** be selected and notified at the beginning of the drill cycle.

2) Key ERO members (as defined in AWP EP-001) **shall** participate in a drill or exercise at least once every eight quarters.

3) All ERO members **should** participate in drills annually or as often as necessary to maintain proficiency.

4) Emergency Planning **should** track and notify personnel who have not participated in an exercise or drill within the year.

5) Personnel not fully ERO qualified may participate in drills for training purposes, but will not be considered qualified for that position until all training requirements are met.

6. RECORDS

1) The following non-quality drill and exercise records **should** be retained within department files for a minimum of 3 years.
   - Scenario and supporting data.
   - Completed forms and documents generated during the drill or exercise.
   - Lists of participants, controllers and evaluators.
   - Copy of the Drill/Exercise report.

7. REFERENCES

None

TITLE: Interim Emergency Response Organization

02/03/03
EFFECTIVE DATE

1. SCOPE

This procedure provides emergency response actions to be taken by the control room during a declared emergency.

This procedure was rewritten; therefore, revision bars are not included.

2. DISCUSSION

The checklists are intended to provide quick reference to all possible emergency response actions and require judgment in prioritizing activities based upon available resources and unforeseen circumstances.

3. RESPONSIBILITIES

Interim Site Emergency Coordinator (ISEC)

Shift manager normally assumes the duties of the ISEC and takes command and control of the emergency response effort until relieved. The ISEC has the responsibility and authority to:

- Declare emergency classifications.
- Notify off-site authorities of the event and make protective action recommendations.
- Conduct assembly and accountability on-site.
- Authorize extraordinary emergency measures such as authorizing emergency response personnel to exceed normal established dose limits.
- Provide direction for all emergency response operations.
- Maintain liaison with off-site authorities.
- Authorize the evacuation of the plant site.
- Approve press releases.
- Initiate on-site and off-site radiological monitoring.

Emergency Evaluation Coordinator (EEC)

A shift technical advisor assumes the duties of the EEC. This position performs technical evaluations of plant response, dose assessments, and protective action recommendations (PARs) for approval by the ISEC. The EEC may also issue KI to emergency workers as directed by the ISEC.

Interim Emergency Operations Coordinator.

The shift foreman of the affected unit assumes this position.

- This position manages control room operational activities and advises the ISEC of needed event reclassifications.

Control Room Communicator #1

This position is assumed by the shift foreman of the unaffected unit.

- Completes the Emergency Notification Form, form 69-20596.
- Ensures emergency notifications to San Luis Obispo County, California State Office of Emergency Services (OES) and the Nuclear Regulatory Commission (NRC) until relieved.

Control Room Communicator #2

The control room communicator #2 is performed by either a balance of plant control operator (BOPCO) or control room assistant (CRA).

- This position performs or ensures notification of emergency response and management personnel.

4. INSTRUCTIONS

4.1 Interim Site Emergency Coordinator (ISEC)

4.1.1 Upon declaration of an emergency, use the ISEC Emergency Checklist, form 69-20644.

NOTE: If the emergency classification changes, exit the existing attachment and start a new attachment.

4.2 Control Room Communicators

4.2.1 Communicator #1 ensures the Emergency Notification Form, form 69-20596 is complete and offsite notifications are performed within **15 minutes** of a declared emergency, in accordance with EP G-3.

4.2.2 Communicator #2 ensures VANS is initiated to notify appropriate personnel within **10 minutes** of a declared emergency, in accordance with the VANS Activation Checklist, form 69-20647.

NOTE: If VANS is unavailable, the backup to this system is used to manually call personnel using the recall roster along with paging phone.

4.2.3 Communicator #2 ensure the assembly and accountability process is initiated, if appropriate, in accordance with EP G-4.

4.3 Emergency Evaluation Coordinator (EEC)

4.3.1 Use Emergency Evaluation Coordinator Checklist, form 69-20645.

4.4 Interim Emergency Operations Coordinator

4.4.1 Manage the control room operational activities.

4.4.2 Provide a turnover briefing to the emergency operations coordinator.

5. RECORDS

Documents generated by this procedure are non-quality good business records and are maintained for a period of three years, in accordance with AD10.ID2.

6. ATTACHMENTS

6.1 Form 69-20644, "ISEC Emergency Checklist," 1/22/03

6.2 Form 69-20645, "Emergency Evaluation Coordinator," 1/22/03

6.3 Form 69-20646, "Control Room Communicators Checklist," 1/22/03

6.4 Form 69-20647, "VANS Activation," 1/22/03

6.5 Form 69-20649, "VANS Manual Operation," 1/22/03

6.6 Form 69-20648, "Paging Phone Activation," 1/22/03

7. REFERENCES

None

DIABLO CANYON POWER PLANT
EP G-2
ATTACHMENT 6.1

1 AND 2

TITLE: ISEC Emergency Checklist

Print Name _____ **Date** _____

The steps in this attachment should be performed in order. The steps may be modified, or may be considered N/A at the discretion of the Interim site emergency coordinator, unless specifically prohibited.

☐ 1. Announce emergency to control room staff and direct staff to assume their emergency response roles.

☐ 2. Direct Communicator #1 to complete the DCPP Emergency Notification Form, form 69-20596.

☐ 3. Direct Communicator #2 to **activate VANS within 10 minutes** of initial emergency classification.

☐ 4. Approve DCPP Emergency Notification Form 69-20596 and direct Communicator #1 to ensure off-site agency notifications are performed **within 15 minutes** of classification in accordance with EP G-3.

☐ 5. If **Unusual Event** make the following PA announcement:

> ***"Attention all personnel. An Unusual Event has been declared for Unit_____,***
> ***due to _____."***

☐ 6. If **Alert, SAE,** or **General Emergency** has been declared:

- Initiate the assembly and accountability process in accordance with EP G-4.
- Make the following PA announcement:

> ***"Attention all personnel. The assembly and accountability process has been activated.***
>
> ***All non-essential personnel, place all work in a safe condition, leave the power block, and return to your normal desks.***
>
> ***All emergency response personnel report to your assigned emergency response facility.***
>
> ***_____ has been declared for Unit_____,***
> (emergency classification)
> ***due to _____."***

☐ 7. Sound the site emergency signal for 60 seconds.

☐ 8. Repeat the PA announcement:

> ***"Attention all personnel. The assembly and accountability process has been activated.***
>
> ***All non-essential personnel, place all work in a safe condition, leave the power block, and return to your normal desks.***
>
> ***All emergency response personnel report to your assigned emergency response facility.***
>
> ***_____ has been declared for Unit_____,***
> (emergency classification)
> ***due to _____."***

- [ ] 9. Ensure Accountability Roster, Form 69-13231is completed and faxed to the watch commander within 15 minutes, in accordance with EP G-4.
- [ ] 10. Evaluate initiation of early work release or site evacuation. Refer to EP G-5.
- [ ] 11. Authorize KI administration in accordance with EP RB-3, if required.
- [ ] 12. Use the ISEC/SEC/RM Turnover Checklist, Form 69-20437 when turning over ISEC responsibilities.
- [ ] 13. STOP here if Alert or higher emergency.

Unusual Event Termination - An Unusual Event may be terminated by the ISEC when plant conditions no longer meet any emergency classification criteria, perform the following steps.

- [ ] 14. Complete DCPP Emergency Notification Form (69-20596) and ensure offsite notifications are made in accordance with EP G-3.
- [ ] 15. Make the following PA Announcement.

  "Attention all personnel. The Unusual Event declared for Unit _____, has been terminated."
- [ ] 16. Ensure an AT REPT action request is initiated with 24 hours of termination.

DIABLO CANYON POWER PLANT
EP G-2
ATTACHMENT 6.2

1 AND 2

TITLE: Emergency Evaluation Coordinator

Print Name _____ **Date** _____

The steps in this attachment may be performed in any sequence, may be modified, or may be considered N/A at the discretion of the interim site emergency coordinator, unless specifically prohibited.

- ☐ 1. If a radiological release is indicated, perform an assessment of site boundary dose rate in accordance with EP R-2 and notify the ISEC.
- ☐ 2. Compare the EP R-2 calculation results with EP G-1 EALs and assist the ISEC with emergency classifications.
- ☐ 3. Activate ERDS on SPDS within 30 minutes of emergency classification.
- ☐ 4. If the EOF is activated, contact the UDAC radiological manager to provide a briefing of plant status, radiological conditions, status of field monitoring teams, and the status of KI administration.

DIABLO CANYON POWER PLANT
EP G-2
ATTACHMENT 6.3

1 AND 2

TITLE: Control Room Communicators Checklist

Communicator #1 (SFM unaffected unit)

Print Name _____ **Date** _____

- ☐ 1. Emergency Classification Time = **T**_____
- ☐ 2. Ensure the County and State are notified within 15 minutes of the classification time written on the DCPP Emergency Notification Form 69-20596.

  T + 15 = _____
- ☐ **NOTE:** When talking with the County or State, do not volunteer information or explanations about the emergency beyond what is on the approved notification form.
- ☐ 3. Ensure the NRC is notified as soon as possible, but within 60 minutes of the classification time written on the DCPP Emergency Notification Form.

Communicator #2 (CRA/BOPCO)

Print Name _____ **Date** _____

- ☐ 1. Obtain copy of completed Emergency Notification Form 69-20596 to use for the on-the-fly message.
- ☐ 2. Activate VANS **within 10 minutes** of the initial event classification.

  T + 10 = _____
- ☐ 3. Upon initiation of the assembly and accountability process, perform Control Room accountability and fax the accountability roster to the DCPP Watch Commander at 3115 **within 15 minutes,** in accordance with EP G-4.

  T + 15 = _____
- ☐ 4. Verify VANS operated correctly by viewing fax report and ensure Shift Manager pager activated within **10 minutes** of VANS activation. If there is a VANS failure, use the brown paging phone.
- ☐ 5. Fax copies of the DCPP Emergency Notification Form 69-20596 to the County, State, NRC, and EPIM (549-9187).
- ☐ 6. Fax copies of the DCPP Emergency Notification Form 69-20596 to the EOF and TSC.

DIABLO CANYON POWER PLANT
EP G-2
ATTACHMENT 6.4

1 AND 2

TITLE: VANS Activation

Use this checklist to notify the emergency response organization during a declared emergency of Alert of higher. The checklist may be used for management notification of Unusual Event, and 1HR/4HR/8HR non-emergency notifications.

VANS Activation

☐ 1. **Activate** VANS within 10 minutes of the initial emergency declaration.

☐ 2. **Press** the CALL VANS button.

☐ 3. **Wait** for VANS response, *"This is the DCC Service Bureau. Please enter your company ID number followed by the pound sign."*

☐ 4. **Press** COMPANY ID and then **press** the # sign. Wait for confirmation.

☐ 5. **Wait** for VANS response, *"Please enter your scenario activation password, followed by the pound sign."*

☐ 6. **Press** the PASSWORD button then **press** the # sign.

☐ 7. **Wait** for VANS response *"To start a scenario, enter the scenario ID followed by the pound sign or press pound alone for more options."*

☐ 8. **Press** the appropriate SCENARIO button then **press** the # sign.

☐ 9. **Wait** for VANS response *"To listen to the current scenario message:*

- *Press 1.*
- *To re-record the scenario message, Press 2.*
- *To start the scenario, Press 3.*
- *To return to the main menu, Press pound."*

☐ 10. **IF Recording** an ON-THE-FLY MESSAGE

Press 2 to record an on-the-fly message

a. Wait for VANS response *"After the tone, speak the new message. When you are finished recording, press the pound sign."*

b. Use ON-THE-FLY MESSAGE TEMPLATE below. Speak the message then press #. The message will be played back to you.

EP G-2 (UNITS 1 AND 2)
ATTACHMENT 6.4

TITLE: VANS Activation

ON-THE-FLY MESSAGE TEMPLATE Use the completed approved Form 69-20596 to obtain information for the on-the-fly message.		
1. This is a Diablo Canyon ☐ Drill ☐ Emergency		2. for ☐ Unit 1 ☐ Unit 2
5. ☐ An Unusual Event ☐ An Alert ☐ A Site Area Emergency ☐ A General Emergency		
6. Number _____ was declared on	7. _____ at month/day/year	8. _____ time
If Block 5 is checked as Alert, Site Area Emergency, or General Emergency, then say: All emergency response personnel report immediately to your assigned facility.		
10. ☐ 10.1 There is no release to the environment above normal operating limits. Effluent rad monitors are not in alarm. ☐ 10.2 There is a release to the environment, effluent radiation monitors alarmed, but rad levels are background at the site boundary. ☐ 10.3 There is a release to the environment, effluent radiation monitors alarmed, and rad levels are above background at the site boundary. ☐ 10.4 A release did occur, but is now terminated.		

c. Wait for VANS response:

- *"To listen to the current scenario message, Press 1.*
- *To re-record the scenario message, Press 2.*
- *To start the scenario, Press 3.*
- *To return to the main menu, Press pound."*

☐ 11. **Press** 3 to start the scenario.

☐ 12. **Wait** for VANS response *"The scenario is building. To start a scenario press 1. To stop a scenario press 2. To check scenario information press 3. To enter a different scenario activation password press 4. To end this call press pound"*

☐ 13. **Press** # to end the call. This can be done at any time after this message begins.

☐ 14. Inform the ISEC when VANS activation is complete and verify his pager was activated.

VANS Manual Activation

☐ 15. IF VANS primary phone is unavailable or failed, or if the ISEC's pager has not been activated after 10 minutes, use VANS Manual Activation form 69-20649 to activate VANS manually using any plant phone with an outside line.

Stopping the Call-Out

- [ ] 16. **Enter** the scenario in the same manner as above.
- [ ] 17. **Wait** for VANS response *"The scenario is currently active. Would you like to stop the scenario, press nine for yes or six for no."*
- [ ] 18. **Press** 9
- [ ] 19. **Wait** for VANS response *"The scenario will be stopped. To start a scenario press 1. To stop a scenario press 2. To check scenario information press 3. To enter a different scenario activation password press 4. To end this call press pound."*
- [ ] 20. **Press** # to end the call.

DIABLO CANYON POWER PLANT
EP G-2
ATTACHMENT 6.5

1 AND 2

TITLE: VANS Manual Operation

ANS Manual Operation

1. **Dial** 9-1-866-727-0976 from any plant telephone with offsite access.
2. When prompted for the company ID, **enter** 3277 followed by the "#" sign.
3. When prompted for the scenario activation password, **enter** 4225 followed by the "#" sign.
4. When prompted for the scenario ID, **enter** the appropriate number from the listing below followed by the "#" sign.
5. Follow the prompts to complete the call-out.

SCENARIOS	
Title	**Id Numbers**
1 Hr/4 Hr/8 Hr Notification	111
Unusual Event	112
Alert, Site Area Emergency, or General Emergency	113
Security Threat - Unusual Event	1010
Orange Level Security Threat – ERO Notification	1012
OCC Call-Out	777
Industrial Fire Officer	999
Weekly ERO Test / Off Hours Unannounced	888
Training Scenario	1007
Drill	1008
Rapid Response Facility Activation Drill	1009
Drill – Security Threat - Unusual Event	1011

Paging Phone Activation

If VANS primary and manual activation are unavailable or failed, use the Paging Phone Activation form 69-20648 to page personnel.

DIABLO CANYON POWER PLANT
EP G-2
ATTACHMENT 6.6

1 AND 2

TITLE: Paging Phone Activation

PAGING PHONE ACTIVATION

The procedure is posted as a sign next to the paging phone in the control room. This is the brown phone next to the VANS phone in the control room that uses the plant pager system and sends a code to preprogrammed pager groups.

1. NOTIFICATION OF UNUSUAL EVENT (NUE) (also use for 1 hr/4 hr/8 hr notifications)
   a. Pick up the receiver and listen.
   b. At the beep, enter **0400** for Management Pager Group.
   c. After 3 tones, enter the password, 5639.
   d. After 3 tones, enter **111** for NUE (also for 1 hr/4 hr/8 hr notification).
   e. Press the pound sign (#) and hang up.
2. ALERT / SITE AREA EMERGENCY / GENERAL EMERGENCY
   a. Pick up the receiver and listen.
   b. At the beep, enter 0411 for ALL Pager Groups
   c. After 3 tones, enter the password, 5639.
   d. After 3 tones, enter 666 for ALERT, SITE AREA EMERGENCY, or GENERAL EMERGENCY.
   e. Press the pound sign (#) and hang up.
   f. Verify the shift manager pager activates

   NOTE: Repeat every 2 to 3 minutes, 3 times if the shift manager pager does not activate
3. Off-Normal Communications

   If Pacific Bell service has been lost or interrupted, VANS primary will still function, however, alternate means of off-site communications include:

   - OPS radio to the Sheriff's Dispatch
   - OPS radio to San Luis Obispo Distribution Operations (SLODO)

     San Francisco (public dial tone): Dial 51-9 from the control room, and company phones will connect you with San Francisco Pacific Bell lines. You will receive a dial tone and continue to dial as from a normal outside Pacific Bell line.

     REMEMBER: You are connected through San Francisco and therefore their telephone area code. All phone calls to SLO will need to be preceded by one and then our area code: 1-805-number.

Phones from which you can dial 51-9 to access San Francisco telephone lines include those located on Units 1 and 2 on the senior control operator consoles, shift foreman phones and the shift manager phones. TSC and EOF some company phones (standard ROLM phones) also have this capability.

TITLE: **Emergency Notification of Off-Site Agencies**

02/03/03
EFFECTIVE DATE

PROCEDURE CLASSIFICATION: QUALITY RELATED

TABLE OF CONTENTS

1. SCOPE

This procedure provides instructions for emergency notification of federal, state, and local agencies in the event of an emergency declared per EP G-1, *Accident Classification and Emergency Plan Activation.*

This procedure was rewritten; therefore, revision bars are not included.

2. DISCUSSION

The San Luis Obispo County Sheriff's Watch Commander and the State Office of Emergency Services are to be notified within 15 minutes of an initial classification of an emergency, a new protective action recommendation, changes to emergency classification levels, changes to protective action recommendations, and emergency terminations.

The NRC is to be notified after state and local agencies, but within one hour, and is to be made by the shift manager, shift foreman, or a licensed operator.

If the NRC requests an open phone line with the control room, a licensed operator or other knowledgeable person should be provided for this purpose.

3. RESPONSIBILITIES

Interim Site Emergency Coordinator (ISEC)

- Approves all offsite notifications and protective action recommendations until relieved.
- Ensures off-site agency emergency notifications are performed until relieved.

Communicators

- Ensure the performance of off-site emergency notifications.

Site Emergency Coordinator (SEC)

- If in command and control after relieving the ISEC, approves all offsite notifications and protective action recommendations until relieved by the recovery manager.
- Ensures off-site agency emergency notifications are performed until relieved.

Recovery Manager (RM)

- Approves all offsite notifications and protective action recommendations.
- Ensures off-site agency emergency notifications are performed.

4. INSTRUCTIONS

4.1 New Notifications

Following a new emergency classification or new protective action recommendation (PAR), ensure:

4.1.1 Form 69-20596, DCPP Emergency Notification Form, is completed immediately.

4.1.2 Within 15 minutes of emergency classification or PAR approval, SLO County Sheriff's Watch Commander and CA State OES are notified.

4.1.3 After County and State notifications, notify the NRC as soon as possible, but within 1 hour.

4.2 Follow-Up Notifications

4.2.1 Complete follow-up Form 69-20596, DCPP Emergency Notification Form approximately every 45 minutes, or sooner if conditions change significantly.

4.2.2 Follow-up notifications to an offsite agency may be waived if it agrees that routine updates are not necessary and conditions are stable.

5. RECORDS

5.1 Forms 69-20596, completed for drills, are nonquality good business records and shall be retained by Emergency Planning for three years.

5.2 Forms 69-20596 completed for a real event are quality related records and shall be retained in accordance with AD10.ID1.

6. ATTACHMENTS

6.1 "Instructions for the DCPP Emergency Notification Form," 1/22/03

6.2 Form 69-20596, "DCPP Emergency Notification Form," 1/22/03

7. REFERENCES

None

DIABLO CANYON POWER PLANT
EP G-3
ATTACHMENT 6.1

1 AND 2

TITLE: Instructions for the DCPP Emergency Notification Form

Notification Process Instructions

These instructions are provided to give an overview and timing requirements for providing emergency classification and protective action recommendation notifications

Time - 0

Conditions requiring emergency action level classification are recognized or, in the case of a new PAR, MIDAS report is available. This starts the 15-minute clock for the decision maker to classify or approve the classification or PAR.

Time + 15

Classification is approved or, in the case of a new PAR, the PAR is approved within 15 minutes of Time -0. This is the date and time entered in blocks 7 & 8.

Time + 30

Notifications for the classification or PAR are complete within 15 minutes of Time + 15.

General Instructions

- All blocks on the form must be completed.
- At beginning of notification to offsite agencies, state the following:
  "This is _____ from Diablo Canyon Power Plant. I am the _____. I am calling to make an Emergency Notification."

Block	Instructions
1	• Check either drill or real emergency event.
2	• Check unit that event applies to. If both units affected, then check both.
3	• Enter number of message. • Number sequentially regardless of notification type - new, follow-up, or termination
4	• Enter type of notification. ❑ New ▪ Initial notification for Unusual Event, Alert, Site Area Emergency, and General Emergency is REQUIRED WITHIN 15 MINUTES. ▪ Notification of a new PAR due to a significant change in projected offsite dose (PAG exceeded in a new PAZ), or wind direction shifts to a new sector during a General Emergency is REQUIRED WITHIN 15 MINUTES of PAR approval. ❑ Follow-up means same ECL and same PAR. Notification not required within a specified time frame. Establish appropriate time of updates with offsite agencies. Typically about every 45 minutes. ❑ Termination – notification for termination of event.
5	• Enter classification of event per EP G-1 or PAR. ❑ Unusual Event ❑ Alert ❑ Site Area Emergency ❑ General Emergency ❑ PAR at General Emergency
6	• Enter the EAL for the emergency classification that is in effect. Refer to EP G-1.
7	• Enter date of approval of classification or PAR. (See Block 14) • Use mm/dd/yy format.

8	• Enter time of approval of classification or PAR. (See Block 14) • Use 2400 clock format.
	Brief description – add additional words that help describe the event (e.g., if fire, describe the type and location). This should be used for amplifying information only, and then only if deemed necessary. It is not necessary to describe the event in detail. Avoid the use of jargon.
9	• If required, assistance would be requested by calling 911, as noted on this form. Must check at least one box regarding assistance requested. Ambulance means medical needs; law enforcement means sheriff's department.
10	• Radiological Release Status. **NOTE:** Background is <.02 mrem/hr. ❑ PIC ▪ Use North Gate PIC exposure rate if wind is from 147-168 degrees. ▪ Use Shooting Range PIC exposure rate if wind is from 304-326 degrees. ❑ Field Reading ▪ Use Field Monitoring Team measured site boundary exposure rate if available. ❑ Calculated ▪ If measured site boundary exposure rate is not available, use calculated site boundary TEDE dose rate from EP R-2 or MIDAS.
10.1 10.2 10.3 10.4	❑ Check only one box below – 10.1, 10.2, 10.3, or 10.4. ❑ 10.1 means any ongoing release is due to normal plant operations and is below tech spec limits. ❑ 10.2 means a release attributable to the event in progress, and resulted in rad monitor alarm, either currently in or were in prior to being isolated but the release is still below background at the site boundary. **NOTE:** Plant vent monitors are RE-14, 14R, 24, 24R, 28, 28, 29. Steam release monitors are RE-71, 72, 73, 74. ❑ 10.3 same as 10.2 only now with dose indicated at the site boundary. ❑ 10.4 used for puff releases such as a VCT, GDT, or LHUT rupture, or when the "release" has been terminated.

EP G-3 (UNITS 1 AND 2)
ATTACHMENT 6.1

TITLE: Instructions for the DCPP Emergency Notification Form

11

- Enter speed in mph (**San Luis Obispo County requires wind speed to be reported in miles per hour (MPH) ONLY).
- Conversion: meters/sec x 2.2 = mph.
- Enter wind direction in degrees.
- If notification being made to Sheriff Watch Commander (prior to EOC being activated), assist with additional information as noted below:

Degrees From	Wind From	Wind To	Affected PAZ's
349-11	N	S	Ocean
12-33	NNE	SSW	Ocean
34-56	NE	SW	Ocean
57-78	ENE	WSW	Ocean
79-101	E	W	Ocean
102-123	ESE	WNW	1, 2, Ocean
124-146	SE	NW	1, 2
147-168	SSE	NNW	1, 2, 5, 9
169-191	S	N	1, 2, 5, 9
192-213	SSW	NNE	1, 2, 5, 9
214-236	SW	NE	1, 2, 4, 5, 8, 9
237-258	WSW	ENE	1, 2, 3, 4, 8
259-281	W	E	1, 2, 3, 4, 7, 8, 11
282-303	WNW	ESE	1, 2, 3, 6, 7, 10, 11, 12
304-326	NW	SE	1, 2, 12
327-348	NNW	SSE	Ocean

12 DCPP protective action recommendations (PAR) – plant condition and recommendations described. Check only one box below - 12.1, 12.2, 12.3, or 12.4.

12.1

- ☐ 12.1 Unusual Event or Alert – Recommendation - No Protective Action Required.

12.2

- ☐ 12.2 Site Area Emergency - Recommendation - No Protective Action Required.

12.3
12.4

- ☐ 12.3 GE with projected site boundary dose < 1,000 mrem TEDE **and** < 5,000 mrem Thyroid CDE
  - Recommendation - automatic evacuation of PAZ 1 & 2.
  - A PAR should take no longer than 15 minutes to formulate and receive approval from the time a dose projection or MIDAS report is produced.
- ☐ 12.4 GE with projected site boundary dose ≥ 1,000 mrem TEDE or ≥ 5,000 mrem Thyroid CDE.
  - Recommendation - automatic evacuation of PAZ 1 & 2.
  - If MIDAS report is available, it will calculate additional PAZs based on dose. These additional PAZs shall be identified.

  NOTE: County has additional actions of sheltering adjacent PAZs as appropriate.

EP G-3 (UNITS 1 AND 2)
ATTACHMENT 6.1

TITLE: Instructions for the DCPP Emergency Notification Form

13	DCPP has made its recommendation in block 12. • Request the UDAC coordinator for concurrence of the DCPP PAR. • Check only one box below 13.1, 13.2, 13.3, or 13.4.
13.1 13.2 13.3 13.4 13.5 13.6	**NOTE**: PAR approval **shall** be within 15 minutes of the time a dose projection or MIDAS report is produced. ❑ 13.1 "UDAC is not ready" means UDAC is either not staffed or is staffed but not ready to comment on block 12. Go to step 14. ❑ 13.2 Check if UDAC concurs with DCPP PAR (Block 12), then go to Step 13.6. ❑ 13.3 Check if UDAC concurs with DCPP PAR (Block 12), but recommends additional sheltering or evacuation (denoted by S or E). **IPZ recommendation** note is for County use only. ❑ 13.4 Check if UDAC concurs with DCPP PAR (Block 12), but may later have additional recommendations. 13.5 Used for additional comments the County Health Officer, County Emergency Services Director, and/or RM/SEC/ISEC may need. 13.6 Insert UDAC Coordinators (County member) name.
14	• Check appropriate box of approver. • Enter name of approver. If desired, allow approver to sign or initial the form.
15	**NOTE**: If drill, use drill phone numbers. • Notification to County and State **shall** be within 15 minutes of approval (Block 8 time). • If communicating by phone, note time of beginning of phone call. If verbal notification is used, note the time the Advisor to the County begins notification to County or State. Notifications – Note time at beginning of the phone call. • Check box for applicable phone number used for notification.

TITLE: **Activation and Operation of the Technical Support Center**

02/26/03
EFFECTIVE DATE

PROCEDURE CLASSIFICATION: QUALITY RELATED

TABLE OF CONTENTS

1. SCOPE{ TC "SCOPE" \F C \L "1" }

   1.1 This procedure specifies Technical Support Center (TSC) actions during a declared emergency.

2. DISCUSSION{ TC "DISCUSSION" \F C \L "1" }

   2.1 The TSC provides an onsite location, independent of the Control Room, for overall coordination of the onsite emergency response. The TSC staff supports the Control Room, diagnoses plant conditions, recommends corrective actions, and coordinates site emergency activities.

   2.2 The TSC should have a maximum continuous occupancy of 40 people. This occupancy limit is posted at the main TSC entrance door (Buttress Area) and the alternate entrance door (104' Turbine Bldg).

3. RESPONSIBILITIES{ TC "RESPONSIBILITIES" \F C \L "1" }

   3.1 Site Emergency Coordinator (SEC)

   Assigns overall command and control of the emergency response effort. Upon activation of the long-term EOF organization, the SEC is responsible for onsite emergency management.

   3.1.1 Prior to long-term EOF activation, the SEC shall:

   a. Declare emergency classifications.

   b. Recommend protective actions to offsite authorities.

   c. Direct assembly and accountability.

   d. Authorize extraordinary emergency measures such as emergency response personnel exceeding Annual Administrative Exposure Limits.

e. Authorize KI administration to onsite personnel until relieved by the Recovery Manager.

f. Provide direction for emergency response operations.

g. Authorize site access for non-plant personnel.

h. Maintain liaison with offsite authorities.

i. Develop a recovery action plan.

j. Approve press releases.

k. Ensure offsite agency and County notifications.

3.2 Assistant Site Emergency Coordinator (ASEC)

3.2.1 Assists the SEC with plant conditions assessment and TSC coordination.

3.3 Liaison Advisor (LA)

3.3.1 Coordinates,

a. Offsite notifications.

b. Emergency response staff notifications.

c. Contact of onsite and offsite emergency support groups.

3.4 Engineering Advisor (EA)

3.4.1 Coordinates plant technical support.

3.4.2 Evaluates event safety consequences.

3.5 Electrical Engineer

3.5.1 Provides plant electrical equipment status.

3.6 Radiological Advisor (RA)

3.6.1 Coordinates emergency radiological response effort.

3.7 Radio Operator

3.7.1 Provides instructions to the onsite radiological Field Monitoring Teams via radio.

3.8 Radiological Data Processor (Plant)

3.8.1 Enables TSC radiation monitors and verifies habitability.

3.8.2 Trends radiation levels in the plant.

3.8.3 Serves as primary contact for Site RP Coordinator in the OSC.

3.8.4 Receives EARS dose calculations from UDAC for onsite FMT data comparison and FMT guidance.

3.9 Liaison Assistants

3.9.1 Establish and maintain constant communications with the Control Room.

3.10 Operations Advisor (OA)

3.10.1 Provides general operational advice and assistance to the SEC.

3.11 Security Advisor (SA)

3.11.1 Coordinates security activities.

3.11.2 Performs accountability in the TSC.

3.11.3 Coordinates evacuation or early dismissal of nonessential site personnel.

3.11.4 Oversees the Fitness for Duty Program in the TSC.

3.12 Maintenance/Logistics Advisor (M/LA)

3.12.1 Advises the TSC staff on plant equipment repairs assessment, site materials capabilities and resource status as required.

3.13 Administrative Advisor (AA)

3.13.1 Provides administrative support.

3.13.2 Directs the TSC clerical staff.

3.13.3 Establishes 24 hour shift schedules for all emergency response facilities.

3.13.4 Executes administrative/logistical functions as directed.

3.14 Mechanical and Electrical Engineer(s)

3.14.1 Performs engineering assessments, trends and recommendations.

3.15 Reactor Engineer(s)

3.15.1 Performs reactor assessments, trends and core damage assessment.

3.16 PPC Operator

3.16.1 Assists the Reactor Engineer in reading the PPC and preparing release pathway information for dose assessment purposes. (No checklist required.)

4. INSTRUCTIONS{ TC "INSTRUCTIONS" \F C \L "1" }

4.1 The position checklists are guidance and may be performed out of the listed order, unless specifically noted.

4.2 TSC personnel shall perform checklist instructions and guidance and other functions as directed.

5. RECORDS{ TC "RECORDS" \F C \L "1" }

5.1 Completed forms and documents generated during drills are non-quality records and **should** be retained within department files for a minimum of 3 years.

5.2 Completed forms and documents generated during real events are non-quality Good Business records and **shall** be retained in RMS in accordance with AD10.ID2.

6. ATTACHMENTS{ TC "ATTACHMENTS" \F C \L "1" }

6.1 Form 69-20436, "Site Emergency Coordinator (SEC) Checklist," 07/30/02

6.2 Form 69-20437, "ISEC / SEC / Recovery Manager Turnover Checklist," 07/30/02

6.3 Form 69-20438, "Plant PA Announcement," 02/14/03

6.4 Form 69-20439, "Assistant SEC (ASEC) Checklist," 02/14/03

6.5 Form 69-20440, "Liaison Advisor (LA) Checklist," 02/14/03

6.6 Form 69-20441, "TSC Liaison Assistant to Control Room Checklist," 02/14/03

6.7 Form 69-20442, "Control Room Liaison Assistant to TSC Checklist," 02/14/03

6.8 Form 69-20443, "NRC Liaison Assistant," 02/14/03

6.9 Form 69-20444, "Engineering Advisor (EA) Checklist," 06/21/02

6.10 Form 69-20445, "Radiological Advisor (RA) Checklist," 06/21/02

6.11 Form 69-20448, "Radiological Data Processor (Plant) Checklist," 06/21/02

6.12 Form 69-20449, "Radio Operator Checklist," 06/21/02

6.13 Form 69-20450, "Operation of the TSC Radiation Monitors," 06/21/02

6.14 "NCPM To Mu Ci/cc Conversion for Radiation Monitors," 06/21/02

6.15 Form 69-20451, "Field Monitoring Team Exposure Tracking Sheet," 06/21/02

6.16 Form 69-20452, "Reactor Engineer Checklist," 06/21/02

6.17 Form 69-20453, "Mechanical Engineer Checklist," 06/21/02

6.18 Form 69-20454, "Electrical Engineer Checklist," 06/21/02

6.19 Form 69-20455, "Operations Advisor (OA) Checklist," 06/21/02

6.20 Form 69-20456, "Security Advisor (SA) Checklist," 02/14/03

6.21 Form 69-20457, "Maintenance/Logistics Advisor (M/LA) Checklist," 06/21/02

6.22 Form 69-20458, "Administrative Advisor (AA) Checklist," 06/21/02

6.23 Form 69-20459, "Operation of the TSC Ventilation System," 06/21/02

7. REFERENCES{ TC "REFERENCES" \F C \L "1" }

7.1 DCPP Emergency Plan.

7.2 EP RB-11, "Emergency Offsite Dose Calculations."

7.3 OP H-5:IV, "Control Room Ventilation System Mode Changes."

7.4 OP K-9, "Instructions for Operation of DCPP Radio Systems."

7.5 Vendor Instruction Manual, Eberline Instrument Corporation, DC 696216-8, "Area Gamma and Air Particulate/Iodine/Noble Gas Monitors."

7.6 STP M-9M, "Verification of Auto-connected Loads Less Than 2750 kW."

7.7 Calculation No. 93-02, "TSC Occupancy."

7.8 PEP EN-1, "Plant Accident Mitigation Diagnostic Aids and Guidelines."

7.9 Severe Accident Management "DFC-TSC Diagnostic Flow Chart" Plant Manual Volume 3E.

7.10 A0559390, "ECG 39.1 Alternate Monitoring Requirements."

DIABLO CANYON POWER PLANT
EP EF-1
ATTACHMENT 6.1 **1 AND 2**

TITLE: Site Emergency Coordinator (SEC) Checklist

Print Name _____ **Date** _____

The steps in this attachment may be performed in any sequence, may be modified, or may be considered N/A at the discretion of the Site Emergency Coordinator, unless specifically prohibited.

☐ 1. Sign in on the Assembly and Accountability Checklist form.

☐ 2. Sign in on the TSC sign-in board.

☐ 3. Use form 69-20437, ***ISEC/SEC/RM Turnover Checklist,*** to conduct a briefing with the ISEC and/or Recovery Manager.

☐ 4. Within approximately 60 minutes of the initiation of the ERO notification, the TSC is required to be staffed by the following positions.

NOTE: Qualified individuals not already filling a minimum staff position may fill vacancies.

☐ Site Emergency Coordinator	☐ Operations Advisor
☐ Reactor Engineer	☐ Maintenance Logistics Advisor
☐ Electrical Engineer	☐ TSC Liaison Advisor
☐ Mechanical Engineer	☐ 2 - FMT Members

☐ 5. When minimum staffing is achieved, declare the TSC activated. Make a PA announcement to declare the TSC activated: ***"Attention all personnel. This is_____, the Site Emergency Coordinator. The TSC is operational and has been activated."***

☐ 6. If the Recovery Manager is unavailable, assume responsibility for overall management of Diablo Canyon's emergency response activities.

☐ 7. Consider Assembly & Accountability (refer to EP G-4).

Prior to Recovery Manager arrival at the EOF:

- ☐ 1. Establish communications with the Advisor to the County and direct all emergency response operations performed by PG&E in the San Luis Obispo area.
- ☐ 2. Approve Protective Action Recommendations to the County.
- ☐ 3. Change the emergency classification as necessary.
- ☐ 4. Approve "DCPP Emergency Notification," Form 69-20596.
- ☐ 5. Ensure the Liaison Advisor notifies required off-site agencies, until relieved by EOF Agency Liaison.
- ☐ 6. Authorize extraordinary emergency measures such as emergency response personnel exceeding Annual Administrative Exposure Limits. Refer to EP RB-2.
- ☐ 7. Authorize KI issuance to on-site and off-site personnel. Refer to EP RB-3.
- ☐ 8. Authorize event press releases.

Continuing Actions

- ☐ 1. Upon the arrival of the NRC Initial Site Team, brief the NRC Reactor Safety Operations Coordinator.
- ☐ 2. Ensure the NRC Co-locator is familiar with telephone use, information flow, and has copies of the same documents used for your position.
- ☐ 3. IF a radiological release is imminent or actually occurring, THEN direct Operations to secure Turbine Building ventilation supply fans.
- ☐ 4. Consult with the Radiological Advisor for onsite radiological protective measures and the Radiological Manager for offsite radiological protective measures.
- ☐ 5. Implement EP G-5 to assess the need for evacuation or early dismissal of non-essential personnel.
- ☐ 6. Implement EP EF-9 if the TSC becomes uninhabitable.
- ☐ 7. Perform periodic status briefings to key TSC staff:
  - Assistant SEC
  - Radiological Advisor
  - Engineering Advisor
  - Operations Advisor
  - Maintenance Logistics Advisor
  - Security Advisor
- ☐ 8. Perform periodic TSC status update by PA announcement.
- ☐ 9. Perform site wide PA announcements after each significant incident or at least hourly.

  Form 69-20438 may be used.

DIABLO CANYON POWER PLANT
EP EF-1
ATTACHMENT 6.2

1 AND 2

TITLE: ISEC / SEC / Recovery Manager Turnover Checklist

Name _____ Date _____ Time _____

☐ Time of Event: _____ ☐ Time ERO Notified: _____
☐ Time Facility *must* be Activated: _____

☐ Current Classification: _____
☐ Reason for Classification: (See Notification form)

☐ Affected Unit: ☐ Unit 1 ☐ Unit 2

☐ Unit 1 Status Mode: _____ Power: _____
☐ Unit 2 Status Mode: _____ Power: _____

☐ Fission barriers challenged: ☐ Fuel ☐ RCS ☐ Containment
☐ Release in progress: ☐ Yes ☐ No
☐ Release source:

Last Notification number: _____
Time it was completed: _____
Next Notification number: _____
Time it is required: _____
Who will do it? ☐ CR ☐ TSC ☐ EOF

Site accountability status	☐ Complete	☐ In Progress	Due: _____
Early work release initiated	☐ Yes	☐ No	Status: _____
Plant evacuation initiated	☐ Yes	☐ No	Status: _____

NOTES

DIABLO CANYON POWER PLANT
EP EF-1
ATTACHMENT 6.3

1 AND 2

TITLE: Plant PA Announcement

Name _____ Date _____ Time _____

1. Attention Plant Personnel. ☐ This is a Drill. **OR** ☐ This is an Emergency.
2. This is an Emergency Announcement.
3. This is (your name).
4. I am the ☐ Site Emergency Coordinator ☐ Assistant Site Emergency Coordinator
5. UNIT ☐ 1 ☐ 2 ☐ 1 and 2
6. Is currently in ☐ An Alert ☐ A Site Area Emergency ☐ A General Emergency
7. This emergency action level is based upon: (state the conditions)

8. ☐ There is NO release in progress at the present time.

   OR

   ☐ There has been a radiological release. Radiation levels have increased. Please stay clear of the following areas.
9. The following actions have been taken to mitigate the event:

10. This has been Emergency Announcement.
11. ☐ This is a Drill.

DIABLO CANYON POWER PLANT
EP EF-1
ATTACHMENT 6.4 **1 AND 2**

TITLE: Assistant SEC (ASEC) Checklist

Name _____ Date _____ Time _____

Initial Actions

- ☐ 1. Sign in on the Assembly and Accountability Checklist form as applicable.
- ☐ 2. Sign in on the TSC sign-in board.
- ☐ 3. Assist SEC with the SEC Checklist.

Continuing Actions

- ☐ 1. If abnormal TSC ventilation line up is indicated (Mode 2, 3 or 4), ensure the Engineering Advisor implements "Operation of the TSC Ventilation System" checklist.
- ☐ 2. If personnel injury occurs onsite, provide status to the Liaison Advisor for transmission to the EOF Agency Liaison.
- ☐ 3. Assume timekeeping and process driving responsibilities for:
  - PA announcements
  - Round-table status updates
  - Emergency notification, PAR formulation and approval
- ☐ 4. Assist the SEC with the timing of TSC and Site PA announcements. These PA announcements should be made hourly to update staff on the emergency status, **OR** as soon as possible following:
  - A significant change in plant radiological conditions;
  - A change in Emergency Action Level (up or down).
- ☐ 5. If requested, assist the SEC with written scripting or notes for upcoming PA announcements.
- ☐ 6. Assist the SEC with the timing of round-table status updates within the management area.

  NOTE 1: Try to synchronize status meetings every 30 minutes and in parallel with the EOF/OSC. This minimizes interruptions while meetings are in progress.

  NOTE 2: Whenever possible, the SM or STA in the Control Room and one person in the OSC should be included in roundtable updates on speakerphone.
- ☐ 7. Assist SEC with the timing of DCPP emergency notifications and PARs and their formulation and approval.
  a. Ensure issuance of DCPP emergency notifications and PARs within **15 minutes** following changes to the event classification or PAR. Follow-up notifications should be made approximately every **45 minutes**.
- ☐ 8. Assist SEC with communications, assessing need for emergency classification changes, and maintaining cognizance of in-plant repair and assessment activities.
- ☐ 9. Provide shift relief with turnover of important information. Include logs, plant status summaries, protective action summaries, activities in progress and any other information required for performance of their duties.

DIABLO CANYON POWER PLANT
EP EF-1
ATTACHMENT 6.5 **1 AND 2**

TITLE: Liaison Advisor (LA) Checklist

Name _____ Date _____ Time _____

Initial Actions

- ☐ 1. Sign in on the Assembly and Accountability Checklist form as applicable.
- ☐ 2. Sign in on the TSC sign-in board.
- ☐ 3. Contact the ELC in the Control Room to determine the status of event classification level, PARs and notifications.
- ☐ 4. Perform the TSC accountability actions, if not done and no clerk is available.
- ☐ 5. Ensure Liaison Assistants have established the following communications:
  - ☐ Communications with EOF EPIM.
  - ☐ Communications with the Control Room on 6002 bridge line.
  - ☐ DCPP emergency notifications to SLO County Sheriff Watch Commander and State OES, until relieved by the EOF.
  - ☐ Communications with the NRC.
- ☐ 6. Phone emergency notification information to the SLO County Sheriff Watch Commander and State OES within 15 minutes of emergency classification or PAR changes.
  - a. Follow-up notifications should be made within approximately 45 minutes.
  - b. NRC notifications should be made as soon as possible, following notification of State and County, within one hour.
- ☐ 7. Send emergency notifications to the EOF (Agency Liaison, if available, OR Sheriff Watch Commander), NLC, State OES and NRC.
- ☐ 8. Establish communications with EOF Agency Liaison to ascertain UDAC status and prepare for emergency notification form origination turnover when appropriate.
- ☐ 9. Ensure notification of the Sheriff's Watch Commander or the Advisor to the County of any plant evacuation. See EP G-5.

Continuing Actions

- ☐ 1. Until relieved by the EOF, ensure the State and County are notified of new classification levels or PARs within 15 minutes of declaration (one hour for NRC), and updated on 45 minute intervals.
- ☐ 2. Keep the EOF Agency Liaison informed of notifications status and ensure a smooth turnover upon EOF activation.
- ☐ 3. If requested by the Radiological Advisor, assist with KI and dosimetry issuance and exposure limit authorizations for site personnel.
- ☐ 4. Maintain a chronological file of completed DCPP emergency notification forms.
- ☐ 5. Maintain separate files for EARS printouts, Log Sheets, and any other significant paperwork.

TITLE: Liaison Advisor (LA) Checklist

Turnover

- ☐ 1. Give a verbal turnover to your shift relief or the EOF Agency Liaison.
- ☐ 2. Instruct your shift relief to complete a new checklist for their shift, entering "N/A" for items that are Not Applicable.
- ☐ 3. Turnover Time: _____ Turnover Date: _____

DIABLO CANYON POWER PLANT
EP EF-1
ATTACHMENT 6.6

1 AND 2

TITLE: TSC Liaison Assistant to Control Room Checklist

Liaison Assistant - TSC to Control Room

Name _____ Date _____ Time _____

Initial Actions

- ☐ 1. Sign in on the Assembly and Accountability Checklist form as applicable.
- ☐ 2. Sign in on the TSC sign-in board.
- ☐ 3. Establish constant communications with the Control Room Liaison Assistant.

Continuing Actions

- ☐ 1. Coordinate bridge phone activity.
- ☐ 2. Retain all past notification forms.

Turnover

- ☐ 1. Give an oral turnover to your shift relief.
- ☐ 2. Instruct your shift relief to complete a new checklist for his/her shift, entering "N/A" for items that are Not Applicable.
- ☐ 3. Turnover Time: _____ Turnover Date: _____

DIABLO CANYON POWER PLANT
EP EF-1
ATTACHMENT 6.7

1 AND 2

TITLE: Control Room Liaison Assistant to TSC Checklist

Liaison Assistant - CR - to TSC

Name _____ Date _____ Time _____

Initial Actions

- ☐ 1. Sign in on the Assembly and Accountability Checklist form as applicable.
- ☐ 2. Sign in on the TSC sign-in board.
- ☐ 3. Establish constant communications with the TSC Liaison Assistant.
- ☐ 4. Ensure initial notifications are complete and fax to the TSC and EOF.
- ☐ 5. Ensure initial plant status form is complete and fax form to TSC.

Continuing Actions

- ☐ 1. Provide technical assistance via the bridge network.

Turnover

- ☐ 1. Give an oral turnover to your shift relief.
- ☐ 2. Instruct your shift relief to complete a new checklist for his/her shift, entering "N/A" for items that are Not Applicable.
- ☐ 3. Turnover Time: _____ Turnover Date: _____

DIABLO CANYON POWER PLANT
EP EF-1
ATTACHMENT 6.8 **1 AND 2**

TITLE: NRC Liaison Assistant

Liaison Assistant - NRC Continuous Communicator

Name _____ Date _____ Time _____

Initial Actions

- ☐ 1. Sign in on the Assembly and Accountability Checklist form as applicable.
- ☐ 2. Sign in on the TSC sign-in board.
- ☐ 3. Establish and maintain constant communications with the NRC.
- ☐ 4. Operate the local PC to obtain plant status.

Continuing Actions

- ☐ 1. Provide technical assistance via the bridge network.

Turnover

- ☐ 1. Give an oral turnover to your shift relief.
- ☐ 2. Instruct your shift relief to complete a new checklist for his/her shift, entering "N/A" for items that are Not Applicable.
- ☐ 3. Turnover Time: _____ Turnover Date: _____

DIABLO CANYON POWER PLANT
EP EF-1
ATTACHMENT 6.9 **1 AND 2**

TITLE: Engineering Advisor (EA) Checklist

Name _____ Date _____ Time _____

Initial Actions

- ☐ 1. Sign in on the Assembly and Accountability Checklist form as applicable.
- ☐ 2. Sign in on the TSC sign-in board.
- ☐ 3. Determine the nature of emergency from the Interim Emergency Evaluation Coordinator (STA) or from the SEC/ISEC turnover information.
- ☐ 4. Ensure Mechanical, Electrical, and Reactor Engineers sign in on staffing board in management area of the TSC.

Continuing Actions

****

CAUTION: When the TSC is switched from non-vital to vital power, the load on the emergency diesel generator must be monitored after the change. The TSC maximum load is approximately 151 kW. (Reference STP M-9M.)

****

- ☐ 1. IF normal power to the TSC is lost, THEN request the Control Room to switch the TSC from non-vital to vital power (specify Unit 1 or Unit 2). The switches are located in the Unit 2 480V Switchgear Room (Panels EPTSN and EPTSC). Evaluate whether EFRDS UPS should also be switched to vital power.
- ☐ 2. Keep the SEC and the Radiological Advisor informed of plant equipment status, personnel status and recommendations regarding plant response actions.
- ☐ 3. If TSC ventilation is lost or if other than normal ventilation modes are required, assign an Engineer to perform actions in accordance with the "Operation of the TSC Ventilation System" checklist.
- ☐ 4. Maintain awareness of Control Room activities.
- ☐ 5. Evaluate plant status, using data from the Engineers:
- ☐ 6. Assist the SEC in determining changes in emergency classification.
- ☐ 7. Assist the SEC in developing plans for returning the plant to a safe condition.
- ☐ 8. Determine engineering evaluations required to support the recovery plan using data from the Engineers in the TSC.
- ☐ 9. Assist the Operations Advisor with development of procedural guidance for abnormal operation of systems or components.
- ☐ 10. Provide Mechanical Engineers direction and assistance
- ☐ 11. Upon direction from the SEC, direct the Reactor Engineer to enter the SAM "DFC-TSC Diagnostic Flowchart" (Plant Manual Volume 3E).
- ☐ 12. Provide shift relief with turnover of important information. Include logs, plant status summaries, protective action summaries, activities in progress and any other information required for performance of their duties.

TITLE: Engineering Advisor (EA) Checklist

TSC Engineering Request / Response Tracking

Date ____________________

Time	Requestor	Assignee	Request/Response	Closed

DIABLO CANYON POWER PLANT
EP EF-1
ATTACHMENT 6.10 **1 AND 2**

TITLE: Radiological Advisor (RA) Checklist

Name _____ Date _____ Time _____

Initial Actions

- ☐ 1. Sign in on the Assembly and Accountability Checklist form as applicable.
- ☐ 2. Sign in on the TSC sign-in board.
- ☐ 3. Contact the STA in the Control Room to receive a turnover on Plant Radiological conditions and release status.
- ☐ 4. Designate a person to complete "Operation of TSC Radiation Monitors" checklist.
- ☐ 5. Verify the following TSC equipment is operational:
  - ☐ Area Radiation Monitors (ARMs)
    - a. If the TSC Area Radiation Monitors are not operating, contact the Engineering Advisor and have the TSC HVAC immediately placed in Mode 4.
    - b. If a Safety Injection (SI) has not occurred, contact the Control Room and have one Unit's Control Room Ventilation placed in Mode 4.
  - ☐ HVAC air monitors.
  - ☐ Alternate Monitoring:
    - a. IF any TSC area monitors are OOS (RE 60, 61, 62, and 63), use the dose rate meter in the RP cabinet to periodically check for elevated dose rates. Additional instrumentation may be obtained at 85' access control.
    - b. IF any TSC air monitors are OOS (RE 66, 67, and 82), the portable CAM located in the TSC may be used to alert personnel of elevated airborne conditions.
    - c. IF any of the TSC laboratory monitors are OOS (RE 65, 68, 69, and 83) and the lab is to be used, place an instrument such as an Eberline RM-14 in the room to alert personnel of changing radiological conditions.
  - ☐ Portable radiological equipment.
  - ☐ EARS computer & Win Trend.
- ☐ 6. Establish TSC habitability control by:
  - ☐ Placing a count rate meter at west TSC entrance.
  - ☐ Closing all airtight doors to the TSC.
  - ☐ Place the appropriate magnetic signs on doors.
- ☐ 7. Stage radiological contamination control equipment at main TSC entrance, i.e., step-off pads, yellow booties, signs, etc.

(Continued next page)

Continuing Actions

- ☐ 1. Upon the arrival of the NRC Initial Site Team, brief your NRC Co-locator (NRC Radiation Safety Coordinator, HP Specialist, PMCL Communicator) on the emergency developments, mitigating actions, and current activities.
- ☐ 2. Ensure the NRC Co-locator is familiar with telephone use, information flow, and has copies of the same documents used for your position.

  NOTE: If the NRC HP Specialist requests to go to the OSC, coordinate the movement of that person between facilities through the OSC Access Supervisor.
- ☐ 3. IF the emergency involves unusual radiological conditions, THEN recommend to the Site Emergency Coordinator that personnel dosimetry be used by all emergency response personnel.
- ☐ 4. WHEN the SEC directs the issuance of personnel dosimetry, THEN contact the following locations and direct personnel dosimetry be issued to all personnel in accordance with EP RB-1, "Personnel Dosimetry."
  - ☐ a. Control Room
  - ☐ b. OSC
  - ☐ c. Security Building
  - ☐ d. Medical Facility
  - ☐ e. CAS/SAS
- ☐ 5. Compare radiological data to the Emergency Action Levels in EP G-1 on an ongoing basis to determine if an EAL change is needed. If so, notify SEC immediately.
- ☐ 6. Establish radiation protection support.
- ☐ 7. Determine necessary personnel for radiation protection support in-plant onsite and offsite.
- ☐ 8. Provide a list of personnel for radiation protection support to Site RP Coordinator, and advise to contact, coordinate and dispatch personnel.
- ☐ 9. Advise Site RP Coordinator to inform you of offsite agency RP support needed.
- ☐ 10. Notify SEC if additional RP Support is necessary from outside agencies.
- ☐ 11. Establish communications with the EOF Radiological Manager.
- ☐ 12. Provide onsite radiation monitoring data and plant radiological conditions information.
- ☐ 13. Inform the ERM that field monitoring teams have been dispatched.
- ☐ 14. Establish communications with the Site Radiation Protection Coordinator.
- ☐ 15. Keep informed of all entries to the RCA and of the location of response personnel.
- ☐ 16. Determine whether plant status changes will affect personnel exposure.

(Continued next page)

☐ 17. Periodically provide the SEC with the following information:

- ☐ Appropriate onsite and offsite protective actions.
- ☐ Radiological exposure status of personnel.
- ☐ Onsite radiological protection decisions.
- ☐ KI - Whenever a calculated Thyroid CDE of 25 rem or greater is likely to be received by an individual or, if possible, prior to undertaking an emergency response operation where high levels of radio-iodine are suspected, or no current air analysis is available, the administration of KI should be considered in accordance with EP RB-3.

☐ 18. Recommend to SEC that KI be issued to site personnel, in accordance with EP RB-3.

☐ 19. WHEN directed by the SEC, THEN issue KI in accordance with EP RB-3.

☐ 20. Maintain cognizance of plant status as given in the TSC Utility Office.

☐ 21. EXPOSURE LIMITS - Prior to undertaking any attempted rescue or corrective actions which could potentially or actually result in an individual exposure in excess of established annual exposure limits, obtain SEC/RM authorization per the guidance in EP RB-2.

☐ 22. PASS - Coordinate with the SEC and the Site Chemistry Coordinator to plan post accident sampling prior to directing entry into areas of known or unknown radiation or contamination levels.

☐ 23. Periodically direct habitability surveys to be conducted of CAS/SAS.

☐ 24. Provide shift relief with turnover of important information. Include logs, plant status summaries, protective action summaries, activities in progress and other information required for performance of their duties.

DIABLO CANYON POWER PLANT
EP EF-1
ATTACHMENT 6.11 **1 AND 2**

TITLE: Radiological Data Processor (Plant) Checklist

Name _____ Date _____ Time _____

Initial Actions

- ☐ 1. Sign in on the Assembly and Accountability Checklist form as applicable.
- ☐ 2. Sign in on the TSC sign-in board.
- ☐ 3. Establish contact with the Site Radiation Protection Coordinator (SRPC) in the OSC. Indicate your extension number and that you will be the primary contact for communication to and from the Radiological Advisor (RA).
- ☐ 4. Poll the RMS, meteorological (MET), and pressurized ion chamber (PIC) data using 'WinTrend'. Inform the RA of abnormal RMS readings. Verify valid RMS and MET data (green values with current time-date stamps).
- ☐ 5. Enable the TSC radiation monitor recorders using the "Operation of TSC Radiation Monitors" form.
- ☐ 6. Check TSC habitability by inspecting the TSC area and airborne monitoring channels.
- ☐ 7. Start SPINGNET to poll SPING data on an ongoing basis.

Continuing Actions

- ☐ 1. Trend the plant radiation monitors (using 'WinTrend'), for changes in plant radiological conditions and release status.
- ☐ 2. Inform the RA immediately if significant changes occur on plant vent, steam line, or containment area monitors. (Refer to the following pages of this checklist.)
- ☐ 3. If RE-14 goes offscale high (shuts down the normal range monitors), inform the RA immediately so that implementation of RB-12 may be considered for quantifying plant vent iodine.
- ☐ 4. Consult UDAC to determine the source term category (if there is a release in progress) which applies in "Field Monitoring Team Exposure Tracking Sheet". Communicate this to the RPC. If the source term category changes, inform the RPC.
- ☐ 5. Provide shift relief with turnover of important information. Include logs, plant status summaries, protective action summaries, activities in progress, etc.
- ☐ 6. Check habitability periodically, by inspecting the TSC area and airborne monitoring channels, and by surveying the vicinity of the TSC main entryways with the portable count rate meter in the RP equipment cabinet. Install step-off pad and frisker by the west door if surface contamination is detected.

Radiation Monitor Trending

1. Click on WinTrend Icon and select DCPP.ARMSDATA Server. Maximize to full screen.
2. Highlight monitors for first graph (all must have same units e.g., cpm) and then click the "GRAPH" button.
3. Dialog box for trend time appears. Default is back 24 hrs. - Click OK.
4. Click 1-minute update button (labeled "1", next to button labeled "5"). Graphs will not update if you don't do this.
5. For next group to trend, select Window, then DCPP.ARMSDATA.
6. Deselect the monitors highlighted from group 1 and highlight the monitors for group 2. Repeat Steps 4-6.
7. When all monitors desired are in graphs, midsize all graph windows and go Windows - Tile.
8. To see any graph in detail, just maximize; mid-size it to return to tile view.

Which radiation monitors do I select?

Scenario 1:	NO Release in progress, AND NO Indication of any one release path being more likely than another.				
Plant Vent:	RE-14	RE-14R	RE-87		
Secondary:	RE15	RE-15R	RE-23		
Containment:	RE-2	RE-30			

Scenario 2:	NO Release in progress, AND hi-rad on RE-2			
Plant Vent:	RE-14	RE-14R	RE-29	RE-87
Secondary:	RE-15			
Containment:	RE-2	RE-30	RE-31	

Scenario 3:	RE-14/14R indicate a Plant Vent release has started.				
Plant Vent:	RE-14	RE-14R	RE-29	RE-87	RE-24
Secondary:	None				
Containment:	RE-2	RE-30			
Other:	RE-34*				
* Direct measure of Containment shine:			1. Shows potential for false high rdg on RE-29. 2. Habitability check for PV sampling.		

TITLE: Radiological Data Processor (Plant) Checklist

Scenario 4:	RE-15/15R or RE-23 indicate primary-secondary leakage.
Plant Vent:	RE-14 RE-14R
Secondary:	RE-71 RE-72 RE-73 RE-74
Containment:	RE-2

RADIATION MONITORING SYSTEM POWER SOURCES

MONITOR	Name/Description	BUS E	BUS F	BUS G	BUS H	BUS I	BATTERY BACKUP
Plant Vent							
R-14 (LRP)	NR Noble Gas			●			
R-14 (RDU)						●	●
R-14R (LRP)	RNR Noble Gas				●		
R-14R (RDU)						●	●
R-24 (LRP)	NR Iodine			●			
R-24 (RDU)						●	●
R-24R (LRP)	RNR Iodine				●		
R-24R (RDU)						●	●
R-28 (LRP)	NR Particulate			●			
R-28 (RDU)						●	●
R-28R (LRP)	RNR Particulate				●		
R-28R (RDU)						●	●
R-29	PV Gross Gamma				●		●
R-34	PV ALARA (PV skid area)				●		
R-87 (LRP)	Extended Range Noble Gas			●			
Secondary							
R-15 (LRP)	Condenser Air Ejector (CAE)	●					
R-15 (RDU)						●	●
R-15R (LRP)	Redundant CAE	●					
R-15R (RDU)						●	●
R-19	Steam Generator Blowdown Sample Line		●				●
R-23	Steam Generator Blowdown			●			
R-71	Main Steamline #1				●		●
R-72	Main Steamline #2				●		●
R-73	Main Steamline #3				●		●
R-74	Main Steamline #4				●		●

(Continued next page)

RADIATION MONITORING SYSTEM POWER SOURCES

MONITOR	Name/Description	BUS E	BUS F	BUS G	BUS H	BUS I	BATTERY BACKUP
Containment							
R-2	Low Range Area				●		●
R-7	Incore Seal Table Room				●		●
R-30	High Range Area				●		●
R-31	High Range Area			●			●
R-44A (LRP)	Containment Purge Exhaust (CPE) - Class 1E Train 'A'			●			
R-44A (RDU)				●			●
R-44B (LRP)	Containment Purge Exhaust (CPE) - Class 1E Train 'B'				●		
R-44B (RDU)					●		●
Fuel Handling Building							
R-58	Spent Fuel Pool Area			●			●
R-59	New Fuel Pit Area				●		●

NOTE 1: LRP = Local Radiation Processor; includes detector and local display.
RDU = Radiation Display Unit; this is the Control Room display.
NR = Normal Range
RNR = Redundant Normal Range

NOTE 2: There are no unit differences on this table

DIABLO CANYON POWER PLANT
EP EF-1
ATTACHMENT 6.12

1 AND 2

TITLE: Radio Operator Checklist

Name _____ Date _____ Time _____

Initial Actions

- ☐ 1. Sign in on the Assembly and Accountability Checklist form as applicable.
- ☐ 2. Sign in on the TSC sign-in board.
- ☐ 3. Contact the Radiological Advisor (RA) or Site Radiation Protection Coordinator (SRPC) at the OSC upon arrival at the TSC and determine if a radiological release has occurred or in progress.
- ☐ 4. Obtain the wind speed and direction from the Plant Rad Data Processor (RDP-Plant).
- ☐ 5. At an ALERT or greater classification, THEN dispatch on and offsite field monitoring team (FMT) personnel in accordance with EP RB-8.
- ☐ 6. Provide the combination key code for the OEL garage to the offsite FMT if requested. The key code is located in the RA's top left desk drawer, 85' Access Senior, or Radiological Manager's top drawer.
- ☐ 7. Evaluate the need for any vehicles in excess of C&RP trucks and coordinate with the SRPC in the OSC.
- ☐ 8. Establish radio communications with the FMT(s).
- ☐ 9. Assign team call names as follows:
  - ☐ Onsite teams use numbers, i.e., "Team ONE," "Team TWO," etc.
  - ☐ Offsite teams use phonetic names, i.e. "Team ALPHA," "Team BRAVO," etc.

Continuing Actions

NOTE: The Controlled Area refers to onsite locations outside of the Protected Area.

- ☐ 1. IF there is a release in progress, instruct the onsite FMTs to perform habitability surveys of the following controlled area assembly areas:
  - ☐ a. Maintenance Shop Bldg Rooms
  - ☐ b. Parking Lot #7
  - ☐ c. Security Bldg Lobby
  - ☐ d. 500 kV Switchyard
- ☐ 2. Direct placement of FMTs to verify:
  - ☐ a. Plume trajectory and spatial distribution (try to position teams on either side of the plume)
  - ☐ b. Direct exposure, airborne radioiodine and particulate concentrations.

- ☐ c. Deposition of radioiodines and particulates.
- ☐ d. Obtain EDE dose rate and airborne I-131 EARS plots from the RDP - Plant and compare values at onsite FMLs with actual FMT data. Notify RA of level of agreement between EARS and FMT data.

NOTE: Potentially high iodine releases should be suspected for: steam generator tube rupture with condenser unavailable, LOCA with plant vent iodine filtration unavailable, or known/suspected fuel damage.

- ☐ 3. Prior to initial plume entry, the FMT members should be directed to take Thyroid Blocking (KI) in accordance with EP RB-3, if necessary.
- ☐ 4. Initial TURNBACK VALUE is 500 mR/hr (instrument reading) for plume entry and air sampling. This value may be adjusted by the RA based on iodine and particulate concentration data.
- ☐ 5. The "Field Monitoring Team Exposure Tracking Sheet" may be used for interim guidance prior to sample analysis.
- ☐ 6. Maintain FMT status board and maps in the radiological assessment area.
- ☐ 7. Update teams at least once per hour or whenever there is a change in the following:
  - ☐ Event status - plant conditions including loss of fission product barriers
  - ☐ Release status
  - ☐ Turn back dose rates
  - ☐ Weather conditions
  - ☐ Personnel protective actions
- ☐ 8. Provide the RA with the Team location.
- ☐ 9. Provide the RA with the Team movement.
- ☐ 10. Provide the RA with the Monitoring results and personnel exposures.
- ☐ 11. Monitor and record team members' exposures.
- ☐ 12. Provide shift relief with turnover of important information. Include logs, plant status summaries, protective action summaries, activities in progress, etc.

DIABLO CANYON POWER PLANT
EP EF-1
ATTACHMENT 6.13 **1 AND 2**

TITLE: Operation of the TSC Radiation Monitors

Placing the Radiation Monitor Recorders in Service

****

CAUTION: When removing or replacing the pens in the recorders, the recorder must be turned off and use the pulleys located at the top rear area of the recorder to move the pen off the left stop. Attempting to move the pen by hand or by pulling the drive cord can cause the recorder to become un-calibrated.

****

Perform the following steps to place each recorder; O-11, O-12, O-13 and O-14, in service:

NOTE: There are two power switches on each recorder. The one closest to the front of the recorder is the power switch for the chart drive. The rear switch is the main power.

☐ 1. Unlatch and pull the recorder out of the cabinet to the second stop. Latch is located at the bottom right corner of the recorder housing.

☐ 2. Turn off the main power switch, located at the right rear.

☐ 3. Remove the dummy pens in the following order: green-blue-red, and store so they can be re-installed after the event or drill.

☐ 4. Install new pens in the following order: red-blue-green.

☐ 5. Turn both power switches, located on the right side of the recorder, to the ON position (front switch to the rear and rear switch to the front).

☐ 6. Slide the recorder into the rack.

NOTE: Holding the switch depressed may alarm the monitor.

☐ 7. Test the response of each channel of the recorder by depressing the green Normal light until deflection of the pen is observed.

Recorder	Channel	
O-11	RE-60	☐
	RE-61	☐
	RE-62	☐
O-12	RE-63	☐
	RE-64	☐
	RE-65	☐
O-13	RE-66	☐
	RE-67	☐
	RE-82	☐
O-14	RE-68	☐
	RE-69	☐
	RE-83	☐

☐ 8. Annotate the chart with the date and time the recorder was turned on.

☐ 9. IF any channel or recorder is not operating properly, THEN inform the Radiological Advisor immediately.

(Continued next page)

Removing the Radiation Monitor Recorders from Service

****

CAUTION: When removing or replacing the pens in the recorders, the recorder must be turned off. Use the pulley shaft located at the top rear area of the recorder to move the pen off the left stop. Attempting to move the pen by hand or by pulling the drive cord can cause the recorder to become un-calibrated.

****

Perform the following steps to each recorder; O-11, O-12, O-13 and O-14 to remove from service:

NOTE: There are two power switches on each recorder. The one closest to the front of the recorder is the power switch for the chart drive. The rear switch is the main power.

☐ 1. Unlatch and pull the recorder out of the cabinet to the second stop.

☐ 2. Turn both power switches, located on the right side of the recorder, to the OFF position.

☐ 3. Remove the pens in the following order: green-blue-red.

☐ 4. Insert the red, then blue, then green dummy pen cartridges into the holders.

☐ 5. Turn on (forward) the main (rear) power switch.

☐ 6. Slide the recorder into the rack.

☐ 7. Annotate the chart with the date and time the recorder was turned off.

Recorder	O-11	_____
Recorder	O-12	_____
Recorder	O-13	_____
Recorder	O-14	_____

Air Monitor Filter Replacement

☐ 1. Obtain two APD filter paper rolls (stock code 62-2044) and two **silver zeolite iodine cartridges (stock code 49-7393) from the storage cabinet** in the Computation Room of the TSC.

☐ 2. Install an APD filter paper roll in RE-66 and RE-68, if necessary.

☐ 3. Dispose of the used filter paper in an appropriate location.

☐ 4. Install an iodine cartridge in RE-82 and RE-83.

☐ 5. Ensure the sample pump is running. The pump switch is located adjacent to the pumps and a screwdriver is required to open the box.

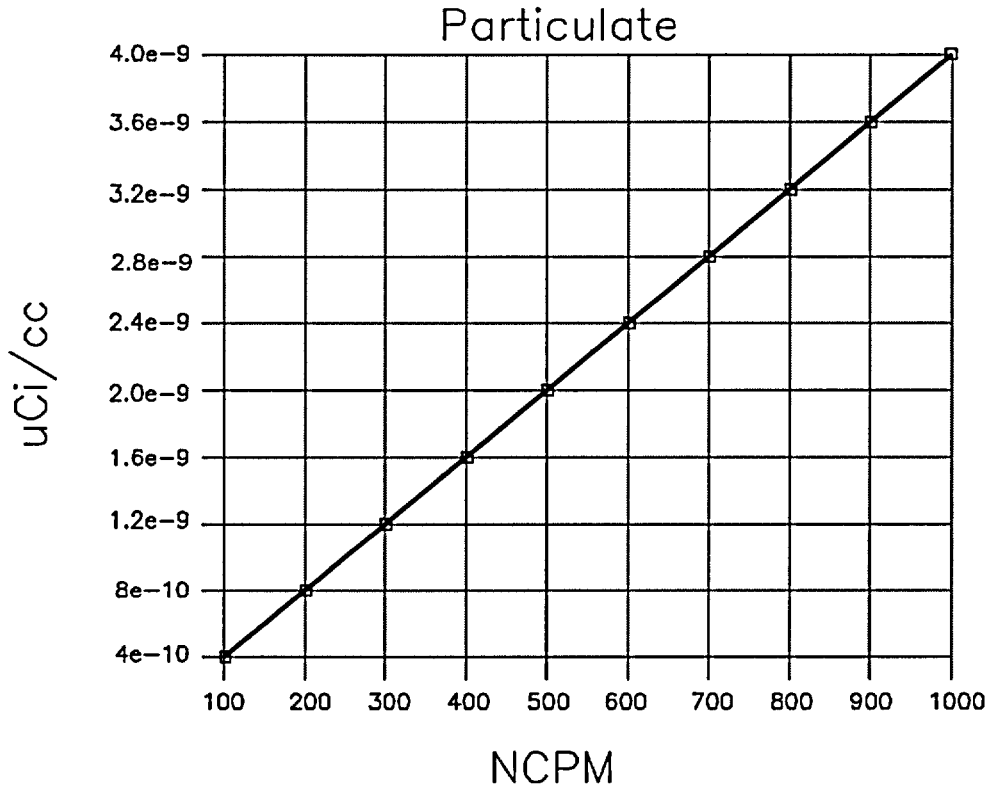
☐ 6. Take the used cartridges from RE-82 and RE-83 to the Sample Lab.

DIABLO CANYON POWER PLANT
EP EF-1
ATTACHMENT 6.14

1 AND 2

TITLE: NCPM To Mu Ci/cc Conversion for Radiation Monitors

Particulate Monitors RE-66 and RE-68 100-1000 NCPM



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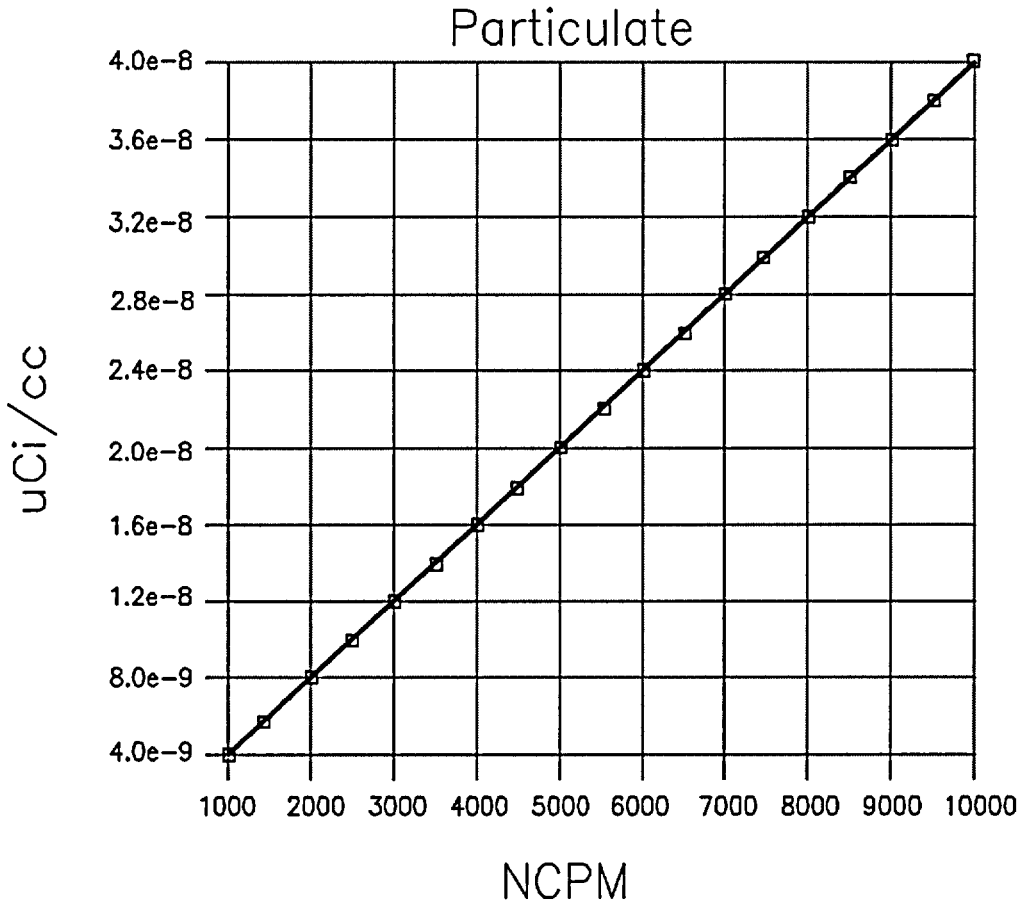
Particulate Monitors RE-66 and RE-68 1000-10,000 NCPM



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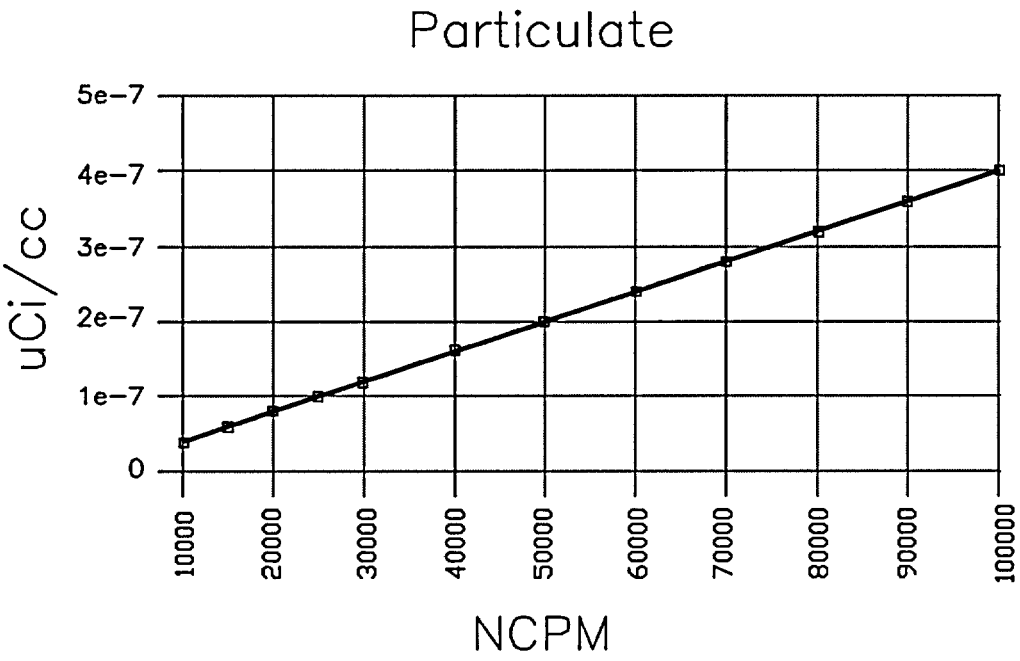
Particulate Monitors RE-66 and RE-68 10,000-100,000 NCPM



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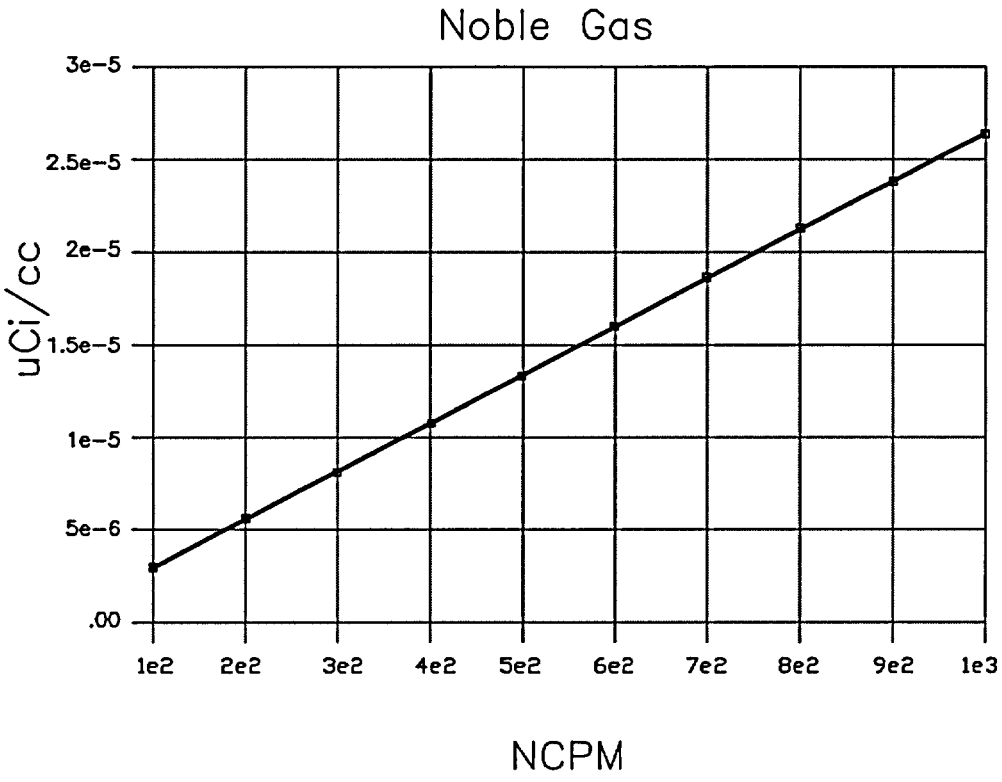
Noble Gas Monitors RE-67 and RE-69 1e2-1e3 NCPM



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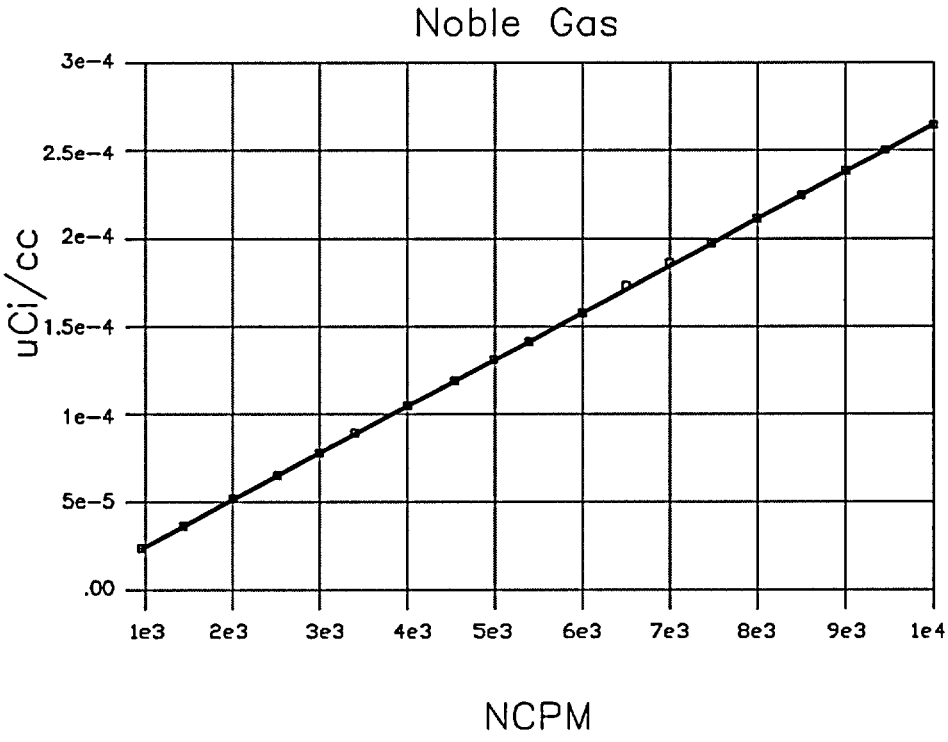
Noble Gas Monitors RE-67 and RE-69 1e3-1e4 NCPM



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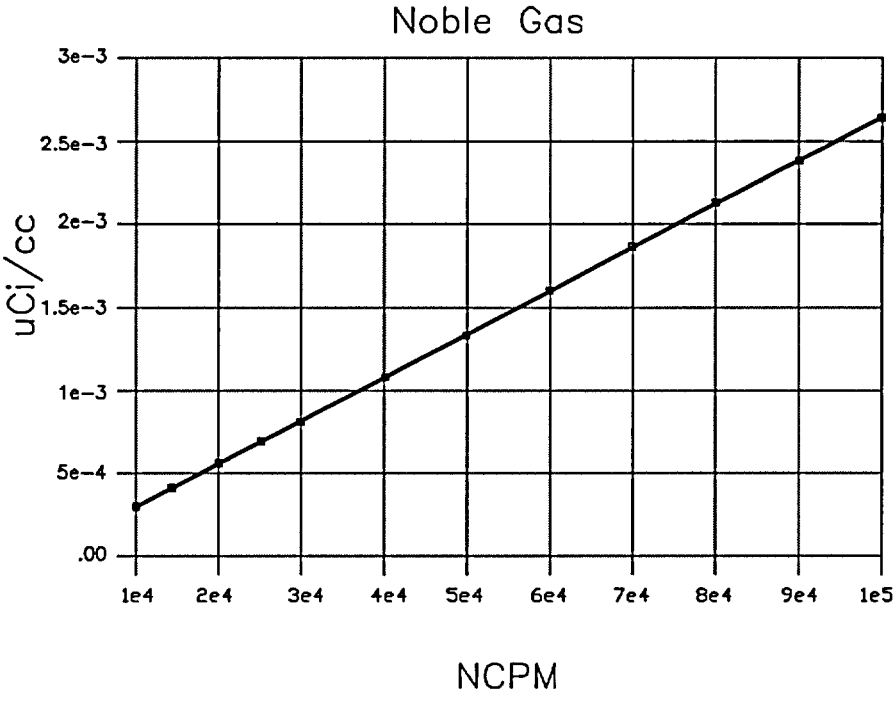
Noble Gas Monitors RE-67 and RE-69 1e4-1e5 NCPM



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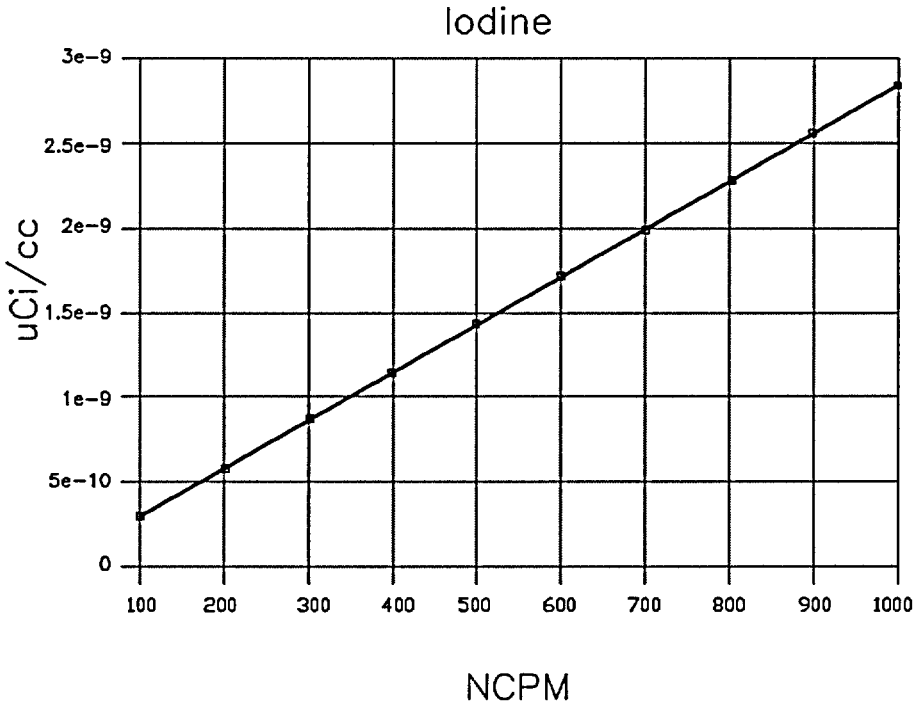
Iodine Monitors RE-82 and RE-83 100-1000 NCPM



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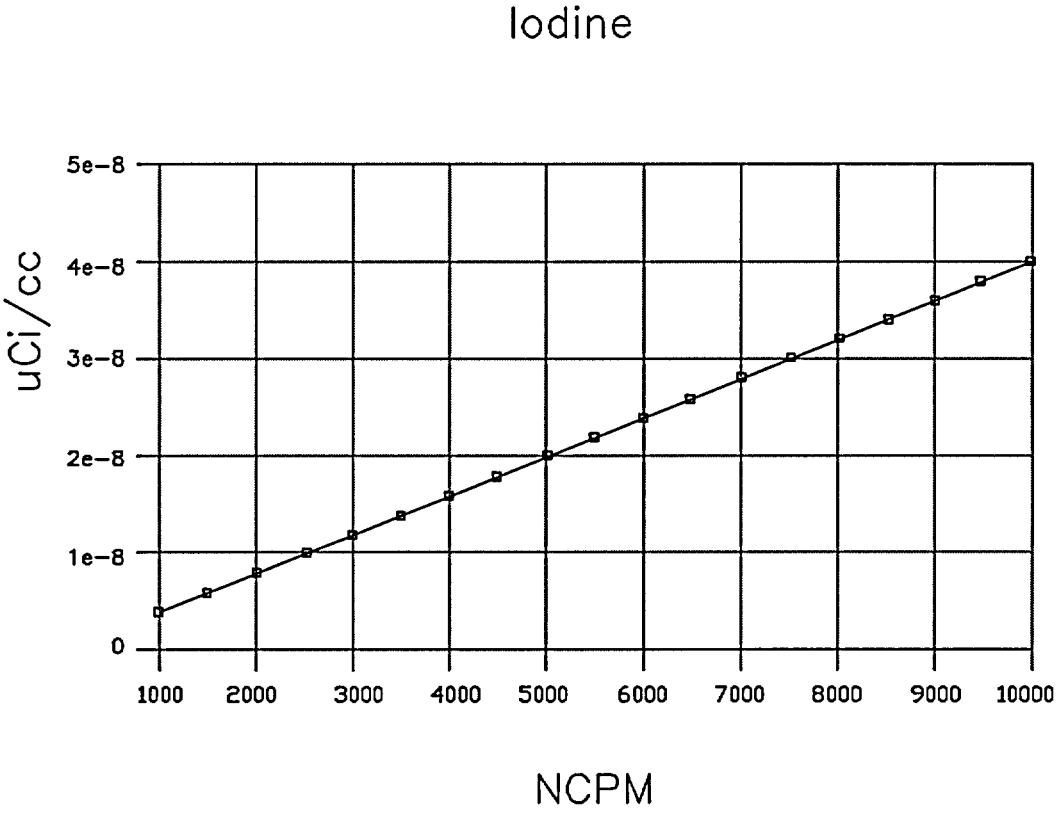
Iodine Monitors RE-82 and RE-83 1000-10,000 NCPM



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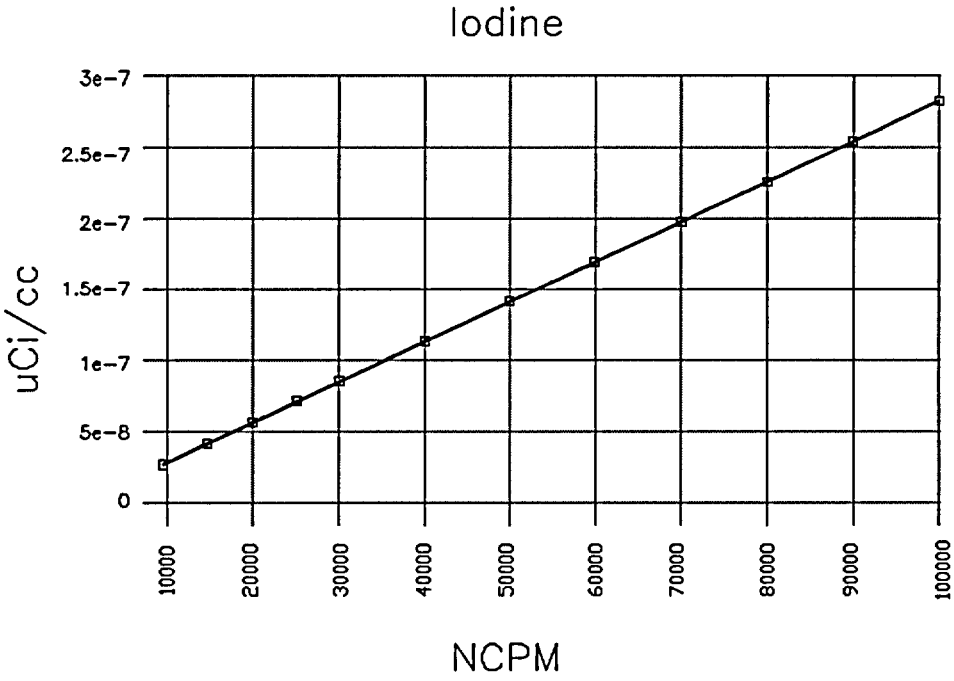
Iodine Monitors RE-82 and RE-83 10,000-100,000 NCPM



DIABLO CANYON POWER PLANT
EP EF-1
ATTACHMENT 6.15 **1 AND 2**

TITLE: Field Monitoring Team Exposure Tracking Sheet

SRD Dose Conversion Factors

Source Term	TEDE DCF No KI	TEDE DCF With KI	THY. DCF No KI	THY. DCF With KI
CORE	13	5	162	16
GAP	24	3	515	52
DB RCS	3	1	40	4
SG Normal	1	1	4	0.4
SG Empty	3	1	40	4
SG Flooded	15	2	285	29

Use the tables above and below to convert PIC readings to Dose.

1) Record the time and readings for both the high and low range PICs.
2) Multiply by the dose conversion factors (DCFs). If the source term changes, use the new DCF multiplier.
3) If a PIC is re-zeroed, circle the last TEDE and Thyroid CDE values and add the circled values to determine the Cumulative TEDE and Thyroid CDE.
4) Refer to EP RB-2 for emergency worker PAGs.

FMT:			Name of Individual:					
	Only use highest onscale PIC reading.		See table above.				Only necessary when PIC is re-zeroed.	
Time Reported	Low Range PIC (mR)	High Range PIC* (Roëntgen)	TEDE DCF	Thyroid CDE DCF	TEDE (mrem)	Thyroid CDE (mrem)	Cumulative TEDE (mrem)	Cumulative Thyroid CDE (mrem)

FMT:			Name of Individual:					
	Only use highest onscale PIC reading.		See table above.				Only necessary when PIC is re-zeroed.	
Time Reported	Low Range PIC (mR)	High Range PIC* (Roëntgen)	TEDE DCF	Thyroid CDE DCF	TEDE (mrem)	Thyroid CDE (mrem)	Cumulative TEDE (mrem)	Cumulative Thyroid CDE (mrem)

(Continued next page)

EP EF-1 (UNITS 1 AND 2)
ATTACHMENT 6.15

TITLE: Field Monitoring Team Exposure Tracking Sheet

FMT:			Name of Individual:				
	Only use highest onscale PIC reading.		See table above.			Only necessary when PIC is re-zeroed.	
Time Reported	Low Range PIC (mR)	High Range PIC* (Roëntgen)	TEDE DCF	Thyroid CDE DCF	TEDE (mrem)	Thyroid CDE (mrem)	Cumulative TEDE (mrem)	Cumulative Thyroid CDE (mrem)

FMT:			Name of Individual:				
	Only use highest onscale PIC reading.		See table above.			Only necessary when PIC is re-zeroed.	
Time Reported	Low Range PIC (mR)	High Range PIC* (Roëntgen)	TEDE DCF	Thyroid CDE DCF	TEDE (mrem)	Thyroid CDE (mrem)	Cumulative TEDE (mrem)	Cumulative Thyroid CDE (mrem)

FMT:			Name of Individual:				
	Only use highest onscale PIC reading.		See table above.			Only necessary when PIC is re-zeroed.	
Time Reported	Low Range PIC (mR)	High Range PIC* (Roëntgen)	TEDE DCF	Thyroid CDE DCF	TEDE (mrem)	Thyroid CDE (mrem)	Cumulative TEDE (mrem)	Cumulative Thyroid CDE (mrem)

FMT:			Name of Individual:				
	Only use highest onscale PIC reading.		See table above.			Only necessary when PIC is re-zeroed.	
Time Reported	Low Range PIC (mR)	High Range PIC* (Roëntgen)	TEDE DCF	Thyroid CDE DCF	TEDE (mrem)	Thyroid CDE (mrem)	Cumulative TEDE (mrem)	Cumulative Thyroid CDE (mrem)

*__NOTE__: The high range PIC reading must be multiplied by 1,000 to convert from Roëntgen to mR.

DIABLO CANYON POWER PLANT
EP EF-1
ATTACHMENT 6.16 **1 AND 2**

TITLE: Reactor Engineer Checklist

Name _____ Date _____ Time _____

Initial Actions

- ☐ 1. Sign in on the Assembly and Accountability Checklist form as applicable.
- ☐ 2. Sign in on the TSC sign-in board.
- ☐ 3. Establish communications with the EOF Engineering Liaison.
- ☐ 4. Perform initial core damage assessment calculations.

Continuing Actions

- ☐ 1. Upon arrival of the NRC Initial Site Team, brief your NRC Co-locator (NRC Rx Systems/Operations Specialist, Senior Resident, RSCL Communicator) on the emergency developments, mitigating actions, and current activities. Ensure the NRC Co-locator is familiar with telephone use, information flow, and has copies of the same documents used for your position.
- ☐ 2. Continue to perform core damage assessments.
- ☐ 3. Provide the results to:
  - ☐ Electrical Engineer.
  - ☐ Mechanical Engineer for entry in the EN-1 data sheet.
  - ☐ EOF Engineering Liaison.
- ☐ 4. Perform engineering functions as necessary or as directed by the Engineering Advisor.
- ☐ 5. Assist in making engineering evaluations to support the recovery plan.
- ☐ 6. Provide shift relief with turnover of important information. Include logs, plant status summaries, protective action summaries, activities in progress and any other information required for performance of their duties.
- ☐ 7. Upon direction from the Engineering Advisor, assume the role of SAM Evaluator and enter the SAM "DFC-TSC Diagnostic Flowchart" (Plant Manual Volume 3E).
- ☐ 8. Maintain communications with Engineering Liaison in the EOF. Discuss plant status, critical parameters, core damage assessment results, potential release pathways, etc.

DIABLO CANYON POWER PLANT
EP EF-1
ATTACHMENT 6.17 **1 AND 2**

TITLE: Mechanical Engineer Checklist

Name _____ Date _____ Time _____

Initial Actions

- ☐ 1. Sign in on the Assembly and Accountability Checklist form as applicable.
- ☐ 2. Sign in on the TSC sign-in board.
- ☐ 3. Establish communications with the Control Room Liaison Assistant on the x6002 bridge line.
- ☐ 4. Request current plant status information.

Continuing Actions

- ☐ 1. Monitor SPDS and PPC for current plant status information.
- ☐ 2. Coordinate with the Liaison Advisor to obtain plant equipment status information.

  NOTE: Plant equipment status information may be provided through the Liaison Assistant in the TSC, or from the Liaison Assistant in the Control Room via the Bridge line (x6002).
- ☐ 3. Refer to PEP EN-1 for specific details on accident types.
- ☐ 4. If required, perform TSC HVAC abnormal lineup, in accordance with "Operation of the TSC Ventilation System" form.
- ☐ 5. Assist in making engineering evaluations to support the recovery plan.
- ☐ 6. If requested, in the event of a steam generator tube rupture, estimate the primary to secondary leakage utilizing STGR.EXE.
- ☐ 7. Provide shift relief with turnover of important information. Include logs, plant status summaries, protective action summaries, activities in progress and any other information required for performance of their duties.

DIABLO CANYON POWER PLANT
EP EF-1
ATTACHMENT 6.18 **1 AND 2**

TITLE: Electrical Engineer Checklist

Name _____ Date _____ Time _____

Initial Actions

- ☐ 1. Sign in on the Assembly and Accountability Checklist form as applicable.
- ☐ 2. Sign in on the TSC sign-in board.
- ☐ 3. Ensure computers are turned on in the TSC engineering area.
- ☐ 4. Consult the PPC to procure current 4kV bus availability information.
- ☐ 5. Determine which unit 4kV bus is out of service (if any).
- ☐ 6. Assess which plant equipment is affected by the bus outage (refer to page 2 of this checklist).
- ☐ 7. Assess which radiation monitors are affected by the bus outage (refer to pages 3 and 4 of this checklist).
- ☐ 8. Provide the results to the Engineering Advisor.

Continuing Actions

- ☐ 1. Continue to monitor PPC for current electrical equipment status information.
- ☐ 2. Refer to PEP EN-1 for specific details on accident types.
- ☐ 3. If required, perform TSC HVAC abnormal lineup, in accordance with "Operation of the TSC Ventilation System" form.
- ☐ 4. Perform engineering functions as necessary or as directed by the Engineering Advisor.
- 5. Assist in making engineering evaluations to support the recovery plant.
- 6. Provide shift relief with turnover of important information. Include logs, plant status summaries, protective action summaries, activities in progress and any other information required for performance of their duties.

(Continued next page)

TITLE: Electrical Engineer Checklist

Safety System Status: (Circle Out of Service Equipment)

Unit-1 4kV Loads			
Component	**Bus F**	**Bus G**	**Bus H**
Diesel	1-3	1-2	1-1
SI	1		2
RHR		1	2
CCP	1	2	
PDP		3	
AFW	3		2
ASW	1	2	
CCW	1	2	3
Cont Spray		1	2
CFCU	1&2	3&5	4

Unit-2 4kV Loads			
Component	**Bus F**	**Bus G**	**Bus H**
Diesel	2-3	2-2	2-1
SI	1		2
RHR		1	2
CCP	1	2	
PDP		3	
AFW	3		2
ASW	1	2	
CCW	1	2	3
Cont Spray		1	2
CFCU	1&2	3&5	4

Off-Site Power Available	☐ 230kV ☐ 500kV

Other Equipment:

(Continued next page)

RADIATION MONITORING SYSTEM POWER SOURCES

MONITOR	Name/Description	BUS E	BUS F	BUS G	BUS H	BUS I	BATTERY BACKUP
Plant Vent							
R-14 (LRP)	NR Noble Gas			●			
R-14 (RDU)						●	●
R-14R (LRP)	RNR Noble Gas				●		
R-14R (RDU)						●	●
R-24 (LRP)	NR Iodine			●			
R-24 (RDU)						●	●
R-24R (LRP)	RNR Iodine				●		
R-24R (RDU)						●	●
R-28 (LRP)	NR Particulate			●			
R-28 (RDU)						●	●
R-28R (LRP)	RNR Particulate				●		
R-28R (RDU)						●	●
R-29	PV Gross Gamma				●		●
R-34	PV ALARA (PV skid area)				●		
R-87 (LRP)	Extended Range Noble Gas			●			
Secondary							
R-15 (LRP)	Condenser Air Ejector (CAE)	●					
R-15 (RDU)						●	●
R-15R (LRP)	Redundant CAE	●					
R-15R (RDU)						●	●
R-19	Steam Generator Blowdown Sample Line		●				●
R-23	Steam Generator Blowdown			●			
R-71	Main Steamline #1				●		●
R-72	Main Steamline #2				●		●
R-73	Main Steamline #3				●		●
R-74	Main Steamline #4				●		●

(Continued next page)

RADIATION MONITORING SYSTEM POWER SOURCES

MONITOR	Name/Description	BUS E	BUS F	BUS G	BUS H	BUS I	BATTERY BACKUP
Containment							
R-2	Low Range Area				●		●
R-7	Incore Seal Table Room				●		●
R-30	High Range Area				●		●
R-31	High Range Area			●			●
R-44A (LRP)	Containment Purge Exhaust (CPE) - Class 1E Train 'A'			●			
R-44A (RDU)				●			●
R-44B (LRP)	Containment Purge Exhaust (CPE) - Class 1E Train 'B'				●		
R-44B (RDU)					●		●
Fuel Handling Building							
R-58	Spent Fuel Pool Area			●			●
R-59	New Fuel Pit Area				●		●

NOTE 1: LRP = Local Radiation Processor; includes detector and local display.
RDU = Radiation Display Unit; this is the Control Room display.
NR = Normal Range
RNR = Redundant Normal Range

NOTE 2: There are no unit differences on this table

DIABLO CANYON POWER PLANT
EP EF-1
ATTACHMENT 6.19 **1 AND 2**

TITLE: Operations Advisor (OA) Checklist

Name _____ Date _____ Time _____

Initial Actions

- ☐ 1. Sign in on the Assembly and Accountability Checklist form as applicable.
- ☐ 2. Sign in on the TSC sign-in board.

Continuing Actions

- ☐ 1. Keep the SEC advised on plant operational activities and any requests for assistance.
- ☐ 2. Prior to arrival of the Engineering Advisor (EA), assume responsibility for the TSC ventilation system. See "Operation of the TSC Ventilation System" form.
- ☐ 3. Assist the Engineering Advisor (EA) in assessing SPDS information and plant data as required.
- ☐ 4. Coordinate with Industrial Fire Officer and offsite fire response agencies as needed.

  NOTE: The Site Emergency Coordinator must approve the operation of systems or components, without written guidance.
- ☐ 5. Coordinate the development of written guidance for operations of systems or components in abnormal configurations.
- ☐ 6. Upon direction from the SEC, assume role of Control Room liaison for SAM Guideline implementation.
- ☐ 7. Provide shift relief with turnover of important information. Include logs, plant status summaries, protective action summaries, activities in progress and any other information required for performance of their duties.

DIABLO CANYON POWER PLANT
EP EF-1
ATTACHMENT 6.20

1 AND 2

TITLE: Security Advisor (SA) Checklist

Name _____ Date _____ Time _____

Initial Actions

☐ 1. Sign in on the Assembly and Accountability Checklist form as applicable.

☐ 2. Sign in on the TSC sign-in board.

☐ 3. Establish communications with the Diablo Canyon Watch Commander (DCWC).

☐ 4. Check for security threat status and advise SEC of threat status.

☐ 5. Obtain concurrence to override OMNI LOCK and override OMNI LOCK if necessary.

☐ 6. Perform TSC accountability in accordance with EP G-4.

☐ 7. Notify the DCPP Watch Commander to contact personnel at the following locations and inform them of the emergency.

☐ Frank Mello (south ranch)
ranch phone 595-2948
cell phone 471-4466

☐ Bill Mello
cell phone 235-8574
page 594-3634
home 438-5020

☐ Bob and Terry Blanchard (north ranch)
ranch house 534-9649
Bob's cell phone 748-0234
Terry's cell phone 748-0235
Cayucos house 995-3752

☐ Point San Luis Lighthouse
595-2936

☐ Peterson family
528-8268

☐ PG&E Ranch House
528-3514
528-3324
528-3515
528-3871

NOTE: Phone numbers are in the red Nuclear Emergency Response Communications phone book.

☐ 8. Instruct the DCPP Watch Commander to ensure sweeps are conducted in the following areas and ensure personnel exit through the north or south gate as appropriate.

- Reverse Osmosis Facility
- Area 10
- Marine Biology Lab.
- Agriculture workers
- Fitness Trail
- Ionics Makeup Water Treatment Facility
- 230 kV / 500 kV Yard
- Pecho Ranch Property

☐ 9. Ensure tour personnel and others are notified in accordance with OM11.ID4.

☐ 10. Request a Security Officer to determine approximate number of vehicles on site. The Sheriff's Department will need this information to determine traffic control needs if evacuation occur

Continuing Actions

- ☐ 1. Determine the need for additional Security personnel for EOF and JMC security.
- ☐ 2. Perform any required continued behavioral observation. Complete both the "Observed Behavior Checklist," and the "Fitness For Duty Call-Out," forms.
- ☐ 3. Coordinate access of approved personnel through Avila Gate.
- ☐ 4. Obtain SEC approval prior to allowing non-plant personnel through onsite or into PA.
- ☐ 5. When SEC directs evacuation or early dismissal of nonessential site personnel, then assign a member of the Security force to become the Site Evacuation Coordinator.
- ☐ 6. IF there is a verified bomb threat, THEN direct the Security forces to sweep all Emergency Response Facilities.
- ☐ 7. Coordinate site access for NRC Relief Teams with NRC Security / Safeguards Coordinator.
- ☐ 8. Upon receipt of the NRC Initial Site Team from Arlington, Texas:
  - ☐ Brief the SEC/ASEC on the NRC Roster and ETA.
  - ☐ Advise the Facilities Liaison about the NRC Roster and ETA so that the Liaison can keep the EOF informed.
- 9. Upon the arrival of the NRC Initial Site Team,
  - ☐ Brief your NRC Co-locator (NRC Safeguards/Security Coordinator) on the emergency developments, mitigating actions, and current activities.
  - ☐ Ensure the NRC Co-locator is familiar with telephone use, information flow, and has copies of the same documents used for your position.
- ☐ 10. Provide shift relief with turnover of important information. Include logs, plant status summaries, protective action summaries, activities in progress and any other information required for performance of their duties.

DIABLO CANYON POWER PLANT
EP EF-1
ATTACHMENT 6.21 **1 AND 2**

TITLE: Maintenance/Logistics Advisor (M/LA) Checklist

Name _____ Date _____ Time _____

Initial Actions

- ☐ 1. Sign in on the Assembly and Accountability Checklist form as applicable.
- ☐ 2. Sign in on the TSC sign-in board.
- ☐ 3. Determine the nature of the emergency and prepare for emergency repair work or mitigating actions by the Maintenance Department.
- ☐ 4. Contact the OSC Emergency Maintenance Coordinator and determine Maintenance staffing.
- ☐ 5. Use the NERC to Contact On-Call Warehouse (Site Materials) representative, if materials assistance is required.
- ☐ 6. Determine the required Maintenance craft personnel needed for response to the event.
- ☐ 7. Request that the Administrative Advisor verify call-out of necessary Maintenance craft personnel.

Continuing Actions

- ☐ 1. Assist in coordinating team assignments with the SEC.
- ☐ 2. Inform the OSC of team priorities.
- ☐ 3. Inform the OSC of changes in plant status, emergency classification or plant conditions that may impact in-plant emergency response team activities.
- ☐ 4. Keep the SEC informed of significant in-plant team activities, such as dispatch of a team, or reporting of results by a team.
- ☐ 5. Provide shift relief with turnover of important information. Include logs, plant status summaries, protective action summaries, activities in progress and any other information required for performance of their duties.

DIABLO CANYON POWER PLANT
EP EF-1
ATTACHMENT 6.22

1 AND 2

TITLE: Administrative Advisor (AA) Checklist

Name _____ **Date** _____

- ☐ 1. Sign in on the Assembly and Accountability Checklist form.
- ☐ 2. Sign in on the TSC sign-in board.
- ☐ 3. Determine clerical staffing levels in the TSC and each of the following facilities by contacting the:
  - ☐ OSC - OSC Access Supervisor
  - ☐ EOF - Advisor to the County
  - ☐ UDAC - Radiological Manager
- ☐ 4. Ensure TSC sign-in staffing board has been signed by all TSC personnel present.
- ☐ 5. Assign clerical personnel to:
  - ☐ Telephone Operator/Administrative Advisor's area
  - ☐ Radiological area
  - ☐ Management area
  - ☐ Ensure office equipment (fax, copy machines) is working and functional
- ☐ 6. Develop plans for providing food and water to emergency response facilities for a long-term event.
- ☐ 7. Establish 24-hour shift manning schedules (12 hour shifts) for the TSC, OSC and EOF. Coordinate with each facility. The Emergency Planning webpage may be used to print out team rosters.
- 8. Establish communications with the Nuclear Logistics Coordinator (NLC).

Continuing Actions

- ☐ 1. Ensure copies of shift schedules are faxed to each facility.
- ☐ 2. Consider the following factors affecting the ability of second shift personnel to respond to DCPP:
  - ☐ Accessible routes to DCPP
  - ☐ Evacuated sectors and associated evacuation time estimates
  - ☐ Impact of evacuation on families
  - ☐ Relocation Centers and available communications
  - ☐ Available transportation
- ☐ 3. Arrange for temporary lodging as needed.
- ☐ 4. Develop plans for providing transportation for on and offsite personnel as directed.
- ☐ 5. Arrange for janitorial services for emergency response facilities. Plan on a long-term event.
- ☐ 6. Provide shift relief with turnover of important information. Include logs, plant status summaries, protective action summaries, activities in progress and other information required for performance of their duties.

DIABLO CANYON POWER PLANT
EP EF-1
ATTACHMENT 6.23

1 AND 2

TITLE: Operation of the TSC Ventilation System

Instructions are provided to establish an abnormal mode of ventilation for the TSC or a loss of the TSC HVAC compressor.

TSC alarm panel with the expected alarm responses are also described.

Definitions

Mode 1 - Normal

Operation of the ventilation system in any mode other than Mode 1 is considered an abnormal operation.

Mode 2 - Fire within the Control Room

This mode only concerns the Control Room in the event of a fire.

Mode 3 - Recirculation

The Control Room is manually isolated when the operators smell or confirm a toxic or flammable gas entering from outside. The TSC is manually isolated also.

Mode 4 - Pressurization

Pressurization, Mode 4, is automatically initiated on high radiation or safety injection signals.

The TSC ventilation system must be manually aligned for Mode 4.

NOTE: Mode 4 may be used after prolonged periods of Mode 3 to purge the CO2 which has accumulated in the TSC.

Loss of TSC HVAC (OS-92) compressor

The HVAC compressor may trip during operation.

Symptoms

Mode 3 - Recirculation

Mode 4 - High Radiation

The following Control Room main annunciators may sound:

- "Control Room Ventilation" (PK15-06)
- "High Radiation" (PK11-21)
- "Containment Isolation Phase A & B" (PK02-01)

(Continued next page)

TITLE: Operation of the TSC Ventilation System

The following TSC alarm panel annunciators may sound

- High radiation in TSC area (AA-1)
- High radiation in TSC airflow (AA-2)
- High radiation in lab area of TSC (AB-1)
- High radiation in lab area airflow (AB-2)

Loss of TSC HVAC (OS-92) compressor

- Higher than normal temperatures in the TSC
- TSC alarm panel window BF, TSC Area Air Condition Off

Automatic Actions

The Control Room ventilation system may transfer to Mode 3 or 4. There are no automatic actions for the TSC ventilation system.

Immediate Actions

Upon notification of initiation of Mode 3 from the Control Room perform the following functions to align the TSC for Mode 3 operation:

☐ 1. Stop the TSC outside (make up) air fan OS-93 using local push button switch.

☐ 2. Start the TSC lead filter supply fan OS-94 using local push button switch. (If not operable, close discharge damper, open discharge damper on OS-95 and start OS-95.)

☐ 3. Close vent damper 0-18 manually.

☐ 4. Verify that vent damper 0-17 is closed.

☐ 5. Open vent damper 0-26 manually.

☐ 6. Verify the following at the annunciator panel PK-75, located in the TSC computation center:

- ☐ AE "TSC MODE 1 NORMAL VENT" not illuminated.
- ☐ BA "NORMAL VENT DAMPER CLOSED" 0-MD-18 illuminated.
- ☐ BB "CARBON FILTER DAMPER OPEN" 0-MD-26 illuminated.
- ☐ BC "NORMAL VENT ON" OS-93 not illuminated.
- ☐ BD "CARBON FILTER LOW AIR FLOW" not illuminated.
- ☐ BE "LAB AREA AIR COND. OFF" OS-90 not illuminated.
- ☐ BF "TSC AREA AIR COND. OFF" OS-92 not illuminated.

(Continued next page)

- ☐ CA "LEAD DUCT HEATER ON" not illuminated.
- ☐ CC "REDUN DUCT HEATER ON" not illuminated.
- ☐ CE "LEAD SUPPLY FAN ON" OS-94 illuminated.
- ☐ CF "REDUN SUPPLY FAN ON" OS-95 not illuminated.
- ☐ DD "PRESS DAMPER OPEN" not illuminated.

NOTE: If these annunciator lights cannot be verified, consult "TSC Annunciator Panel" table for further instructions.

When the TSC ventilation system must be in Mode 4, align the TSC HVAC.

☐ 1. Stop the TSC outside (make up) air fan OS-93 using local pushbutton switch.

☐ 2. Start the TSC lead filter supply fan OS-94. (If not operable, close vent damper 0-24, open vent damper 0-25 on OS-95 and start fan OS-95.)

☐ 3. Close vent damper 0-18 manually.

☐ 4. Open vent damper 0-17 manually.

☐ 5. Open vent damper 0-26 manually.

6. Close or verify closed the following doors:

- ☐ Mechanical room outside water tight door (BU 215-2)
- ☐ Computation center outside water tight door (BU 206-2)
- ☐ NRC Office outside water tight door (BU 211-2)
- ☐ Laboratory outside water tight door (West) (BU 219-2)
- ☐ Laboratory outside water tight door (East) (BU 216-2)

☐ 7. Verify the following at annunciator panel PK-75, in the TSC computation center:

- ☐ AE "TSC Mode 1 Normal Vent" not illuminated.
- ☐ BA "Normal Vent Damper Closed" illuminated.
- ☐ BB "Carbon Filter Damper Open" illuminated.
- ☐ BC "Normal Vent Fan On" not illuminated.
- ☐ BD "Carbon Filter Low Air Flow" not illuminated.
- ☐ CA "Lead Duct Heater On" illuminated.
- ☐ CC "Redun Duct Heater On" not illuminated.
- ☐ CE "Lead Supply Fan On" illuminated or

(Continued next page)

☐ CF "Redun Supply Fan On" illuminated as required.

☐ DD "Press Damper Open" illuminated.

NOTE: If any of these annunciator lights cannot be verified, consult "TSC Annunciator Panel" table for further instructions.

Loss of TSC HVAC compressor

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CAUTION: Do NOT adjust the TSC HVAC thermostat

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☐ 1. IF loss of the TSC HVAC compressor is indicated by the TSC alarm panel, window BF, "TSC Area Air Conditioning OFF," THEN attempt to restart the compressor by turning the ON/OFF switch, located at the thermostat next to the main TSC entrance door (Buttress Area), to OFF for 10 seconds, then ON.

This action resets the high compressor head pressure trip.

IF the previous step did not restart the compressor, THEN dispatch a person to the TSC ventilation room to perform the following:

☐ 1. Remove the lower covers on TSC HVAC A/C unit, OS-92

☐ 2. Depress the reset for the motor high temperature trip, located in the upper left corner of the right opening (red button in a black box).

☐ 3. Check the oil level sightglass below the reset switches, there must be oil visible in the sightglass.

☐ 4. IF there is no oil in the sightglass, THEN return to the TSC and notify Maintenance for repairs

☐ 5. Depress the reset for the low oil pressure trip, located directly below the motor high temperature trip reset (silver button in a white box).

☐ 6. Return to the TSC HVAC thermostat and turn the ON/OFF switch to OFF for 10 seconds, then ON.

☐ 7. IF the above actions did not reset the compressor, THEN notify the TSC Maintenance Advisor for assistance.

NOTE: High head pressure may be identified by a high outlet temperature, greater than 120°F, or a low outlet/inlet temperature difference of less than 10°F. The thermometers are located to the left of the OS-92 unit.

Bubbles in the sightglasses on the liquid lines may indicate low suction pressure. These sightglasses are located in the lower left compartment.

Liquid line solenoid failure may be checked by touching the solenoids by the liquid line sightglasses. If they are not warm, then they may not be working.

The unit air filter may be clogged. Access is on the right of the front of the unit.

(Continued next page)

Subsequent Actions

Returning to Mode 1 Operation

The Control Room will place the Control Room ventilation mode selector switch located at vertical board 1VB4 (2VB4) in the Mode 1 position to return the Control Room ventilation system to normal operation.

The TSC ventilation system must be manually returned to normal by performing the following.

- ☐ 1. Stop Lead Supply Fan OS-94 (and OS-95 if started).
- ☐ 2. Start Outside (make up) Air Fan OS-93.
- ☐ 3. Damper 0-18 opened manually.
- ☐ 4. Damper 0-17 closed manually.
- ☐ 5. Damper 0-26 closed manually
- ☐ 6. Open room air control slide gate.

(Continued next page)

TSC Annunciator Panel

The following is a list of each TSC annunciator panel light with information included on what to do in the event a light does not function properly.

Window	Information
AA-1	(RED) High radiation in TSC area. If illuminated, notify the Radiological Advisor for evaluation and response.
AA-2	(RED) High radiation in TSC airflow. If illuminated, notify the Radiological Advisor for evaluation and response.
AB-1	(RED) High radiation in lab area of TSC. If illuminated, notify the Radiological Advisor for evaluation and response.
AB-2	(RED) High radiation in lab area airflow. If illuminated, notify the Radiological Advisor for evaluation and response.
AC	SPARE. Not illuminated.
AD	SPARE. Not illuminated.
AE	TSC Mode 1 Normal Ventilation. Illuminated in normal operation Mode 1.
AF	SPARE. Not illuminated.
BA	"Normal Vent Damper Closed," 0-MD-18. If illuminated in Mode 1, verify manual operated damper 0-18 is closed.
BB	"Carbon Filter Damper Open," 0-MD-26. Illuminated when damper 0-26 is open in Mode 1 operation. If illuminated in Mode 1, verify manually operated damper 0-26 is closed.
BC	"Normal Vent Fan On," OS-93. Illuminated in normal operation Mode 1. Should be off in Mode 3 or 4 operation.
BD	"Carbon Filter Low Air Flow," FB-94. Illuminated when there is not enough airflow through carbon filters. Check lead and redundant supply fans OS-94 and OS-95 for one of them to be running with corresponding damper open, 0-24 or 0-25 in Modes 3 or 4. Normally illuminated in Mode 1.
BE	"Lab Area Air Condition Off," OS-90. Illuminated if air conditioning is off. Notify Electrical Maintenance.
BF	"TSC Area Air Condition Off," OS-92. Illuminated when air conditioner for TSC is not in operation. Notify Electrical Maintenance.

(Continued next page)

Window	Information
CA	"Lead Duct Heater On," OEH-28A. Illuminated in proper Mode 4 operation. Heater maintains incoming air humidity low for best charcoal filter operation. May not activate if incoming air is sufficiently warm.
CB	"Lead Duct Heater Malfunction," OEH-28A. Illuminated when a malfunction is triggered in Mode 4 operation. To troubleshoot check the following:

- ☐ a. Check circuit breaker panel PPTSC3 to be on.
- ☐ b. Check motor starter switch LPTSC3 to be on with green light illuminated.
- ☐ c. Check damper 0-17 to be open.
- ☐ If the lead duct heater still will not function, turn the starter switch LPTSC3 off and energize LPTSC4 for redun. supply heater OEH28B.

CC	"Redun Duct Heater On" OEH-28B. Illuminated in proper Mode 4 operation.
CD	"Redun. Duct Heater Malfunction," OEH-28B. Illuminated when a malfunction has tripped a sensor. To trouble shoot, check the following:

- ☐ a. Check circuit breaker panel PPTSC4 to be on.
- ☐ b. Check motor starter switch LPTSC4 to be on with green light illuminated.
- ☐ c. Check damper 0-17 to be open.
- ☐ If both OEH-28A and OEH-28B cannot be energized, notify Control Room that Mode 4 operation of ventilation system is not functioning.

CE	"Lead Supply Fan On" OS-94. Illuminated in normal Mode 3 or 4 operation. If inoperable in Mode 3 or 4, check the following:

- ☐ a. Check circuit breaker panel PPTSC-6 to be on.
- ☐ b. Check at local disconnect switch LPTSC-5, place in ON position and verify green light is illuminated.
- ☐ c. Press start button and verify green light is out and red light is illuminated with fan running.
- ☐ d. Verify corresponding damper is open 0-24 or 0-25.
- ☐ If the fan will not operate properly, turn local disconnect switch LPTSC-5 off and LPTSC-6 on for fan OS-95.

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Window	Information
CF	"Redun. Supply Fan On" OS-95. Illuminated in Mode 3 or 4 when OS-94 is not functioning. Notify the Control Room of malfunction.
DA	"TSC Radiation Monitor Failure And Loss of AC Power." Illuminated when the TSC radiation monitor fail or lose AC power. Switch the TSC to vital AC power. If still illuminated, notify the Shift Foreman.
DB	"Fire Detector." Illuminated when fire is detected in HVAC Room.
DC	"UPS Malfunction." Notify Electrical Maintenance.
DD	"Pressurization Damper Open" 0-MD-17. Illuminated when damper 0-17 is open. Damper 0-MD-17 must be closed in Mode 1, open in Mode 4.
DE	"TSC Open Ctr Air Cond On," OS-100. Air conditioner in the operations room is on. Notify Electrical Maintenance if not illuminated.