

TO: NRC DCC

VERMONT YANKEE CONTROLLED DOCUMENT TRANSMITTAL FORM

License No DPR-28
Docket No 50-271

SECTION 1

DOCUMENT TITLE: IMPLEMENTING PROCEDURES TO THE E-PLAN

COPY NUMBER: 54

CHANGE NUMBER: #188

ISSUE DATE: October 24, 2000

INSTRUCTIONS:

- a. Attached is an authorized controlled copy to the above listed document for retention as your assigned copy.
- b. Review the revised material.
- c. Incorporate new change into the controlled document by document issue date, if applicable.
- d. Ensure that those who use the document are aware of the change.
- e. Destroy all superseded pages.
- f. Destroy obsolete forms and insert new forms into the files.
- g. Sign and date this form and return to the Executive Secretary (ES) or Document Control Center (DCC).
- h. Complete appropriate change information on VY Controlled Document Record of Changes.

TRANSMITTED BY: *Quinn Melus*
ES or DCC Signature

AFTER COMPLYING WITH THE ABOVE INSTRUCTIONS, PLEASE RETURN TO THE ES OR DCC WITHIN 10 DAYS OF THE ISSUE DATE.

SECTION 2

The undersigned acknowledges completion of the preceding instructions.

Signature of Recipient: _____ Date: _____

A045

Eplan Implementing Plant Procedures

To: Eplan Implementing Procedure Controlled Set Holders

From: Diane McCue *DMC*

Date: 10/24/00

Re: VY Eplan Implementing Procedure Change # 188, Instruction Sheet

LPC's: The following LPC's should be incorporated into the appropriate procedures:

| <u>Proc/Rev #</u> | <u>LPC#</u> | <u>Procedure Title</u> |
|--------------------------|--------------------|--|
| OP 3511/11 | 1 | Off-Site Protective Action Recommendations |
| OP 3712/15 | 2 | Emergency Plan Training |

LPC's

VERMONT YANKEE NUCLEAR POWER STATION

OPERATING PROCEDURE

OP 3511

REVISION 11

OFF-SITE PROTECTIVE ACTION RECOMMENDATIONS

LPC 1

USE CLASSIFICATION: CONTINUOUS

| LPC No. | Effective Date | Affected Pages |
|---------|----------------|--|
| 1 | 10/05/00 | Cover Page, 1, 2, 4 & 5 of 8; VYOPF 3511.01 Pg 1 of 1; Table 3 Pg 1 of 1; Figure 1 Pg 1 of 1 |
| | | |

Implementation Statement: OP 3511 Rev. 11 is approved for continued use with a new Review Date of 01/27/02.

Issue Date: 01/27/98

OP 3511 Rev. 11
Cover Page
LPC #1

| | | | |
|--------------|-------|-------------|-----------------|
| Dept. Mgr. | _____ | Proc. No. | <u>OP 3511</u> |
| PORC | _____ | Rev. No. | <u>11</u> |
| Plant Mgr. | _____ | Issue Date | <u>01/27/98</u> |
| Sr. VP, Ops. | _____ | Review Date | <u>01/27/00</u> |

OFF-SITE PROTECTIVE ACTION RECOMMENDATIONS

PURPOSE

To specify the criteria that is utilized for making a Protective Action Recommendation (PAR) to the appropriate Emergency Planning Zone States.

LPC 1 The use classification of this procedure is **Continuous Use**.

DISCUSSION

Responsibilities:

1. Shift Supervisor/Plant Emergency Director (SS/PED):

Authorizes the initial Protective Action Recommendation to the State authorities until relieved by the TSC Coordinator or Site Recovery Manager.

2. Technical Support Center (TSC) Coordinator:

Authorizes Protective Action Recommendation to the State authorities until relieved by the Site Recovery Manager.

3. EOF Coordinator/Radiological Assistant:

Evaluates radiological data used to determine the appropriate Protective Action Recommendation and provides recommendation to the Site Recovery Manager at the EOF/RC.

4. Site Recovery Manager (SRM):

The cognizant individual with the overall responsibility and authority to provide the appropriate Protective Action Recommendation to the State authorities.

The decision making process to determine the Protective Action Recommendation for the plume exposure emergency planning zone is based on two criteria. The criteria include the consideration of plant conditions at the General Emergency classification, and projected and measured radiological doses in the environment.

For a Protective Action Recommendation based on plant conditions at the General Emergency classification, information is obtained on in-core fuel conditions, fission product inventory in containment, containment integrity, and release conditions. This information is then utilized to determine the appropriate Protective Action Recommendation (i.e., shelter or evacuation) based upon the guidance contained in Figure 1.

For a Protective Action Recommendation based on release of radioactivity, the appropriate information concerning projected and measured dose rates in the environment is utilized. Determination of the population at risk is based upon meteorological data (wind speed, wind direction, and stability class). The exposure time is based upon available information such as plant conditions or type of accident. In the event that this cannot be readily approximated, a default release duration estimate is utilized. The projected and measured dose is calculated from this information.

The projected or measured dose is then utilized to determine the appropriate Protective Action Recommendation based upon Environmental Protection Agency (EPA) guidance.

The following instructions are included in this procedure:

| | <u>Title</u> | <u>Page</u> |
|-----|--|-------------|
| I. | Protective Action Recommendation Based on Plant Conditions at the General Emergency Classification | 3 |
| II. | Protective Action Recommendation Based on Radiological Dose Information | 5 |

ATTACHMENTS

| | | |
|----|---------------|--|
| 1. | VYOPF 3511.01 | Protective Action Recommendation Worksheet |
| 2. | VYOPF 3511.02 | Deleted |
| 3. | Table 1 | Deleted |
| 4. | Table 2 | Deleted |
| 5. | Table 3 | General Emergency Protective Action Guidelines Based on Plant Conditions |
| 6. | Table 4 | Dose Projection Protective Action Guidelines - Towns 10 Miles Downwind |
| 7. | Table 5 | Dose Projection Protective Action Guidelines - Towns 5 Miles Downwind |
| 8. | Figure 1 | Flow Chart - General Emergency Protective Action Recommendations |

REFERENCES

1. Technical Specifications
 - a. None
2. Administrative Limits
 - a. None
3. Other
 - a. NUREG 0654, Rev. 1, "Criteria for Preparation and Evaluation of the Radiological Emergency Response Plans at Nuclear Power Plants."

NOTES

- Initial notification of the General Emergency based on plant conditions, with determined Protective Action Recommendation, must be initiated to state authorities within 15 minutes.
- Initial notification of the General Emergency based on plant conditions, with determined Protective Action Recommendation, should not be delayed due to performing dose projections or awaiting their results.
- Two individuals should be assigned to formulate the PAR independently to ensure accuracy.

-
1. Use Figure 1 and Table 3 (ER2000-1363) to determine the appropriate Protective Action Recommendation (PAR) based on plant conditions.
 2. A second individual must independently verify the PAR. The verification may be performed by the individual who is approving the PAR (PED, TSC Coordinator, or Site Recovery Manager).
 - a. If the actual or potential release pathway is a stack release, use the upper wind direction.
 - b. If the actual or potential release pathway is a ground release, use the lower wind direction.
 - c. If the actual or potential release pathway is a multiple release (stack and ground), use both the upper and lower wind direction.

NOTE

Any prior protective action recommendations that are still in effect shall be included with updated information and documentation (VYOPF 3511.01).

-
3. Record appropriate PAR information in Section I of VYOPF 3511.01.
 4. Review PAR with the Site Recovery Manager or senior manager in charge to obtain approval.
 5. Transmit approved PAR to State authorities as delineated in OP 3504 (use VYOPF 3504.03).
 6. Forward completed VYOPF 3511.01 to the Site Recovery Manager or senior manager in charge.

B. Subsequent Actions

1. Continue to obtain updated information on plant conditions.
2. If significant changes occur with plant or meteorological conditions, repeat steps in Section I.A. to re-evaluate Protective Action Recommendation.

II. Protective Action Recommendation Based on Radiological Dose Information

A. Immediate Actions by the EOF Coordinator/Radiological Assistant

NOTE

If EOF/RC is not activated, the SS/PED or TSC Coordinator will be responsible for implementing this section.

1. Obtain current off-site dose projection results and meteorological data (wind direction and stability class) from OP 3513.

NOTE

ODPS and METPAC will automatically compare EPA Protective Action Guidelines with off-site dose projection results. Each computer program provides PARs for selected downwind distances in program printouts and computer screens.

2. Determine appropriate Protective Action Recommendations (PARs) as follows: (Use Section II of VYOPF 3511.01).
 - a. Compare the calculated dose projection results with EPA Protective Action Guidelines delineated below to determine whether EPA Protective Action Guidelines have been exceeded.

PROTECTIVE ACTION RECOMMENDATION WORKSHEET

INFORMATION CURRENT AT: _____ / _____ (Time/Date)

PROTECTIVE ACTION RECOMMENDATIONS

LPC I

SECTION I: PLANT CONDITIONS

(Fill in with appropriate letter designation for affected towns from Table 3)

S = Shelter in Place
OR
E = Evacuate

VERMONT TOWNS

_____ Brattleboro
_____ Guilford
_____ Vernon

NEW HAMPSHIRE TOWNS

_____ Hinsdale
_____ Winchester

MASSACHUSETTS TOWNS

_____ Bernardston
_____ Northfield

Performed By: _____

Verified By: _____

SECTION II: RADIOLOGICAL DOSE

(Fill in with letter designation for affected towns from Table 4 or 5)

E = Evacuate

OR

(Check if appropriate)

_____ NO PARs Based on Radiological Dose

VERMONT TOWNS

_____ Brattleboro
_____ Dummerston
_____ Guilford
_____ Halifax
_____ Vernon

NEW HAMPSHIRE TOWNS

_____ Chesterfield
_____ Hinsdale
_____ Richmond
_____ Swanzey
_____ Winchester

MASSACHUSETTS TOWNS

_____ Bernardston
_____ Colrain
_____ Gill
_____ Greenfield
_____ Leyden
_____ Northfield
_____ Warwick

The following was used (Circle One):
Nomogram ODPS METPAC Field Data

Performed By: _____

Verified By: _____

LPC I

LPC I

LPC I

(The following information to be filled in by Senior Manager in charge or designated alternate)

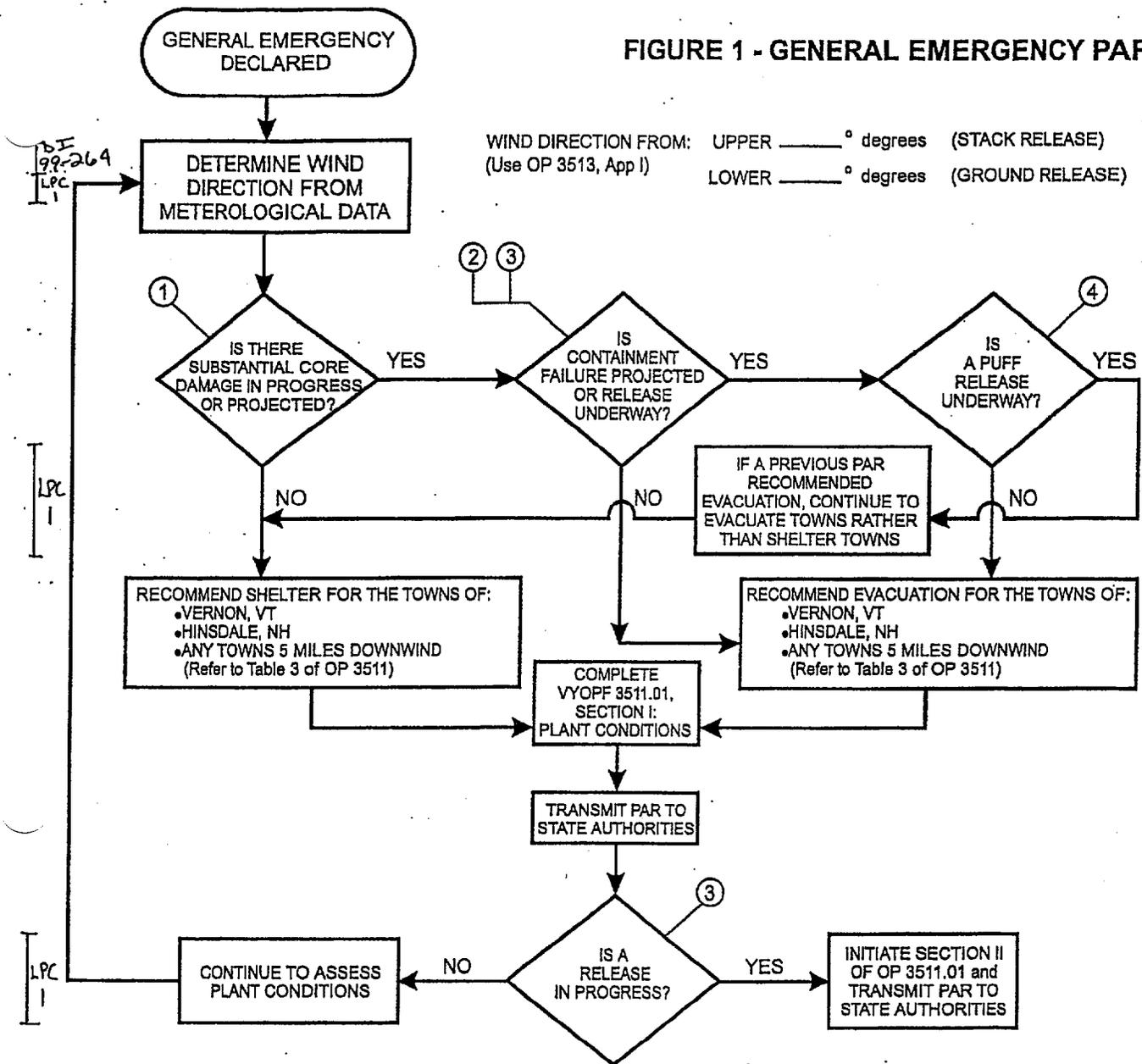
Approved By: _____
PED: ___ TSC Coordinator: ___ Site Recovery Manager: ___ (Check one)

TABLE 3

Sec 1 GENERAL EMERGENCY PROTECTIVE ACTION GUIDELINES BASED ON PLANT CONDITIONS

| WIND IS FROM: | TOWNS 5 MILES DOWNWIND | |
|---|------------------------|---|
| Sector A (348° - 11°) North | Vernon Hinsdale | Bernardston Northfield Guilford |
| Sector B (12° - 33°) NorthNorthEast | Vernon Hinsdale | Bernardston Northfield Guilford |
| Sector C (34° - 56°) NorthEast | Vernon Hinsdale | Bernardston Northfield Guilford |
| Sector D (57° - 78°) EastNorthEast | Vernon Hinsdale | Guilford Bernardston |
| Sector E (79° - 101°) East | Vernon Hinsdale | Brattleboro Guilford Bernardston |
| Sector F (102° - 123°) EastSouthEast | Vernon Hinsdale | Brattleboro Guilford |
| Sector G (124° - 146°) SouthEast | Vernon Hinsdale | Brattleboro Guilford |
| Sector H (147° - 168°) SouthSouthEast | Vernon Hinsdale | Brattleboro Guilford |
| Sector J (169° - 191°) South | Vernon Hinsdale | Brattleboro Guilford Winchester |
| Sector K (192° - 213°) SouthSouthWest | Vernon Hinsdale | Winchester |
| Sector L (214° - 236°) SouthWest | Vernon Hinsdale | Winchester |
| Sector M (237° - 258°) WestSouthWest | Vernon Hinsdale | Winchester |
| Sector N (259° - 281°) West | Vernon Hinsdale | Winchester Northfield |
| Sector P (282° - 303°) WestNorthWest | Vernon Hinsdale | Winchester Northfield |
| Sector Q (304° - 326°) NorthWest | Vernon Hinsdale | Winchester Northfield Bernardston |
| Sector R (327° - 347°) NorthNorthWest | Vernon Hinsdale | Winchester Northfield Bernardston |

FIGURE 1 - GENERAL EMERGENCY PARs



NOTES

(1) INDICATORS OF SUBSTANTIAL CORE DAMAGE MAY INCLUDE:

- Significant Radioactive Inventory in Primary Containment
 - Containment radiation monitor readings >5000 R/hr
- Loss of Critical Functions for Core Protection
 - Reactor water level <TAF
 - ECCS not available to maintain core cooling

(2) INDICATORS OF CONTAINMENT FAILURE MAY INCLUDE:

- Drywell Pressure >42 psig and Increasing
- PCIS Failure to Isolate Containment
- Primary Containment H₂/O₂ Concentration Increasing

(3) INDICATORS OF SIGNIFICANT RELEASE OF RADIOACTIVITY TO ENVIRONMENT MAY INCLUDE:

- Increasing and Elevated Stack High Range Monitor Readings
- Measurable Radiation Levels Above Background at or Beyond Site Boundary
- Extremely High and Increasing Reactor Building ARM Readings

(4) INDICATORS OF A PUFF RELEASE MAY INCLUDE:

- Predictable Release Duration for Short Time Period (e.g., Release Duration <1Hour)
- Controlled Release Where the Timing of the Duration is Known

VERMONT YANKEE NUCLEAR POWER STATION

OPERATING PROCEDURE

OP 3712

REVISION 15

EMERGENCY PLAN TRAINING

USE CLASSIFICATION: **INFORMATION**

| LPC No. | Effective Date | Affected Pages |
|---------|----------------|------------------|
| 1 | 08/24/00 | 1, 2 & 3 of 5 |
| 2 | 10/16/00 | 1, 2, 3 & 4 of 5 |

Implementation Statement: N/A

Issue Date: 08/27/99

| | | | |
|--------------|-------|-------------|-----------------|
| Dept. Mgr. | _____ | Proc. No. | <u>OP 3712</u> |
| PORC | _____ | Rev. No. | <u>15</u> |
| Plant Mgr. | _____ | Issue Date | <u>08/27/99</u> |
| Dir. of Ops. | _____ | Review Date | <u>08/27/01</u> |

EMERGENCY PLAN TRAINING

PURPOSE

To specify the Emergency Plan training requirements for the Vermont Yankee staff and supporting contractors and to outline the training provided for local medical support personnel, local fire department, the news media, and state and local government emergency assistance personnel in support of the emergency response.

The use classification of this procedure is **Information Use**.

DISCUSSION

LPC 2

The Vermont Yankee staff and supporting contractors annually receive a general overview training module covering the Emergency Plan and the Implementing Procedures to the Emergency Plan as part of GET. Additionally, some personnel receive position specific training to qualify them for their respective assignments during an Emergency. These position specific training modules and assignments to them are specified by the Emergency Assistance Personnel List which is formulated by the Emergency Plan Coordinator.

The Vermont Yankee Emergency Plan Training is based upon Appendix E to 10CFR50, Vermont Yankee's Emergency Plan, and the Implementing Procedures to the Emergency Plan. It is, where applicable, performance-based, personnel-specific training and is assigned in accordance with the Emergency Assistance Personnel List (EAPL). The Emergency Plan Coordinator maintains the Emergency Assistance Personnel List with assistance from the Training Department per AP 3532, Emergency Preparedness Organization.

On a quarterly basis, the Emergency Plan Coordinator will publish an updated list of Emergency Assistant Personnel training status. The list will show who has completed emergency response training for the updating of the Emergency Assistant Personnel List. (MOO ID 8714)

LPC 2

The Emergency Assistance Personnel List assignments will be audited annually by the Emergency Plan Coordinator in conjunction with the VP, Operations and the Plant Manager to ensure continued concurrence with emergency response assignments (MOO ID 8714).

LPC 1

The Emergency Plan Supervisor, in conjunction with the Technical Training Manager, will evaluate changes to the Emergency Plan and the Implementing Procedures to the Emergency Plan to determine if the change or changes require additional training (MOO ID 8714). Similarly, the Emergency Plan Supervisor and the Technical Training Manager review and approve applicable Emergency Plan training materials for use (INS8707CPE2).

Formal critiques will be held of all training exercises. Identified weaknesses and/or deficiencies requiring further corrective action will be forwarded to the Emergency Plan Supervisor for resolution in accordance with OP 3505, Section C. (MOO ID 8914)

The following sections are included in this procedure:

| | <u>Title</u> | <u>Page</u> |
|------|--|-------------|
| I. | EMERGENCY RESPONSE TRAINING | 3 |
| I.A | OSC Staff | 3 |
| I.B | News Media Center | 4 |
| I.C | Medical Response Team | 4 |
| I.D | Controller Training | 4 |
| II. | SPECIAL EMERGENCY RESPONSE TRAINING GROUPS | 4 |
| II.A | Local Medical Support Personnel | 4 |
| II.B | State and Local Governments | 5 |
| II.C | Local Fire Department | 5 |

I/LPC 2

REFERENCES

1. Technical Specifications
 - a. None

2. Administrative Limits
 - a. On a quarterly basis, the Emergency Plan Coordinator will publish an updated list of Emergency Assistant Personnel training status. The list will show who has completed emergency response training for the updating of the Emergency Assistant Personnel List. (MOO ID 8714)

 - b. The Emergency Assistance Personnel List assignments will be audited annually by the Emergency Plan Coordinator in conjunction with the Director of Human Resources & Public Affairs and the Plant Manager to ensure continued concurrence with emergency response assignments. (MOO ID 8714)

3. Other
 - a. Vermont Yankee Emergency Plan
 - b. Vermont Yankee Implementing Procedures to the Emergency Plan
 - c. Appendix E, 10CFR50
 - d. Training Department Directives
 - e. Emergency Plan Training Program Description
 - f. AP 0700, Vermont Yankee Staff Training
 - g. AP 0840, Medical Response Team Training
 - h. OP 3505, Emergency Preparedness Exercises and Drills
 - i. OP 3510, Off-Site and Site Boundary Monitoring
 - j. AP 3532, Emergency Preparedness Organization
 - k. AP 6807, Collection, Temporary Storage and Retrieval of QA Records

I/LPC 1

RESPONSIBILITIES

1. The Emergency Plan Supervisor has the overall responsibility to ensure all training is completed in accordance with Emergency Plan Training Program Description (EPTPD). (SSCA0983, IFI932401)
- ILPC 1 2. The Emergency Plan Liaisons are responsible for coordinating the training of the local medical support personnel, state and local government personnel, and personnel from the Vernon fire department and other Southwestern Fire Mutual Aid District fire departments within the VY 10 mile EPZ. The Training Department will, upon request, assist in this effort (Section II.A,B,C of this procedure)(SSCA 0539 and SSCA 0618).
- ILPC 1
ILPC 2 3. The Director of Human Resources and Public Affairs is responsible for annual training of the news media and News Media Center Staff. Training Department will, upon request, assist in this effort (Section I.B of this procedure).
- ILPC 1 4. The Training Department is responsible for completion of training in accordance with the EPTPD under the direction of the Technical Training Manager.
5. The Vermont Yankee Emergency Plan Training is based upon Appendix E to 10CFR50, Vermont Yankee's Emergency Plan, and the Implementing Procedures to the Emergency Plan. It is, where applicable, performance-based, personnel-specific training assigned in accordance with the Emergency Assistance Personnel List (EAPL). The Emergency Plan Coordinator maintains the Emergency Assistance Personnel List with assistance from the Training Department per AP 3532, Emergency Preparedness Organization.

PROCEDURE

Emergency Plan training will be provided for the following groups.

I. EMERGENCY RESPONSE TRAINING

ILPC 2 Emergency Response training is required for initial qualification and is the basis for required annual (calendar year) refresher/continuing training.

The initial position specific emergency response training is defined in the Emergency Plan Training Program Description (EPTPD) for all but the following personnel.

A. OSC Staff

LPC 2 Personnel assigned to the OSC Staff (Chem Techs, RP Techs, Auxiliary Operators, administrative support, etc.) are required to complete general emergency plan overview training as part of either initial GET or annual GET requa. Emergency plan duties for OSC Staff require them to maintain qualification in their primary job function. No additional training is required.

LPC 1

B. News Media

The Director of Human Resources and Public Affairs coordinates a training program to acquaint local news media personnel with the emergency plans, points of contact for release of information, location of News Media Centers, and update on public information packets sent to the public. This training is conducted annually.

C. Medical Response Team

Medical Response Team training requirements are specified in AP 0840.

D. Controller Training

Initial training for this group is designed to enable assigned controllers to proficiently perform their duties during drills and exercises. Topics include:

1. Role and responsibilities of controllers.
2. Techniques for presenting drill/exercise conditions.
3. Rules for controlling participant free-play.
4. Methods of interacting with players.
5. Operation of communication systems.
6. Safety precautions (both personnel and plant safety) to be observed.
7. Contingency plans if actual problems arise.
8. Observation and evaluation techniques for evaluating player performance.

Refresher training will be conducted as pre-drill/exercise briefings.

II. SPECIAL EMERGENCY RESPONSE TRAINING GROUPS

A. Local Medical Support Personnel

Selected local Medical Support Personnel are offered annual training in the following areas:

1. basic radiation protection,
2. personnel and equipment decontamination,
3. use of radiation instruments,
4. establishing radiation and contamination control areas,
5. biological sampling, and
6. plant access and reporting requirements.