

## FIRE PROTECTION PROGRAM PLAN

### 1.0 GENERAL

#### 1.1 PURPOSE

The purpose of this program is to define the responsibilities and mechanics for implementation of the Three Mile Island Fire Protection Program Plan.

#### 1.2 SCOPE

This procedure applies to phases of station operations, quality assurance, maintenance, modifications, inspection, testing and training which impact fire protection and are addressed by the TMI Fire Protection Program Plan.

#### 1.3 REFERENCES

The following referenced documents outline commitments, responsibilities, and methods designed for maintaining fire protection controls:

- a) Fire Hazard Analysis - TMI Unit I. Fire Protection Program Evaluation - TMI Unit II.
- b) Appendix A to NRC Branch Technical Position APCSB 9.5-1 dated May 1, 1976.
- c) Three Mile Island Nuclear Station Technical Specifications - Unit I and Unit II.
- d) Plant Modification Fire Protection Program-EMP-013.
- e) TMI-1 Restart Modification Engineering Change Memorandum - EMP-008.
- f) TMI - Emergency Plan, AP-1004.
- g) FSAR - TMI Unit I and TMI Unit II.
- h) Operational Quality Assurance Plan.

### 2.0 RESPONSIBILITIES AND REQUIREMENTS - TECHNICAL FUNCTIONS

- a) The organization to support the responsibilities and requirements outlined in section 1.3 a through g is shown in Enclosure 1. The organization to support quality assurance in accordance with section 1.3 h is described in the Operational Quality Assurance Plan.

#### 2.1 SENIOR VICE PRESIDENT

- a) The Senior Vice President is responsible for the Fire Protection Program Plan and its effectiveness. He is responsible for coordinating and implementing the program, with his periodic review for adequacy and effectiveness resulting in correcting deficiencies by administrative action.
- b) The Senior Vice President shall ensure that an audit is performed at least once per 24 months of the Fire Protection Program Plan

and implementing procedures. Specific cognizance for this review is defined in each unit's Technical Specifications, Reference C.

- c) The Senior Vice President shall ensure that at 36 month intervals as prescribed in reference c an inspection and audit of the Fire Protection Program is performed by outside qualified Consultants. Consultant qualifications shall include Society of Fire Protection Engineers member status.

## 2.2 FIRE PROTECTION REVIEW COMMITTEE

- a) A team comprised of management representatives will conduct an annual inspection of station facilities using a committee chairman approved checklist to identify deficiencies in fire protection and provide recommendations for correction to the Senior Vice President. Members of this team are selected by and will be under the direction of a Fire Protection Review Committee Chairman. This inspection satisfies the Technical Specification annual inspection requirement for each unit.
- b) The Fire Protection Review Committee Chairman shall schedule the annual inspection with the Station Fire Protection Engineering group to ensure their availability for support of the inspection.
- c) The Fire Protection Review Committee Chairman or representative, should observe the annual fire drill held with the public fire departments.

## 2.3 DIRECTOR, NUCLEAR ASSURANCE

- a) The Director, Nuclear Assurance is responsible for auditing and surveillance to ensure that all activities prescribed in the Fire Protection Program Plan are conducted in accordance with the requirements of applicable sections of the Operational Quality Assurance Plan.

## 2.4 MECHANICAL COMPONENTS MANAGER

- a) The Manager of Engineering and Design has delegated to the Mechanical Components Manager the responsibility to secure input relative to fire protection measures from the Fire Protection Program Coordinator and the Station Fire Protection Engineering Group for incorporation into Unit I and Unit II modifications during criteria development.
- b) The Mechanical Components Manager maintains the Fire Hazards Analysis Reports for TMI Unit I and Fire Protection Program Evaluation for TMI Unit II.
- c) The Mechanical Components Manager reviews and concurs with all physical modifications that may affect the Fire Hazards Analysis.

## 2.5 FIRE PROTECTION PROGRAM COORDINATOR (FPPC)

- a) The FPPC shall review all modifications that may affect the Fire Hazards Analysis/Fire Protection Program Evaluation.
- b) The FPPC shall provide technical support for management reviews

of the Fire Protection Program.

- c) The FPPC shall review and resolve recommendations for technical modifications made by the Fire Protection Review Committee and fire protection consultants with the assistance of the Station Fire Protection Engineering Group.
- d) The FPPC provides concurrence with Station Fire Protection Engineering group resolution of insurance carrier concerns.

## 2.6 INSURANCE AND CLAIMS ADMINISTRATOR

- a) The Insurance and Claims Administrator pursues and resolves issues affecting insurance carriers which are not resolved by routine interfacing between the Fire Protection Program Coordinator, the Station Fire Protection Engineering Group, and insurance carrier representatives.

## 3.0 RESPONSIBILITIES AND REQUIREMENTS - OPERATIONAL FUNCTIONS

### 3.1 DIRECTORS - UNIT I AND UNIT II

- a) The Unit Director shall ensure that station operations are carried out in accordance with the operating license (including the Technical Specifications); this includes insuring that the Fire Protection Program Plan and its implementing procedures are followed by station staff. These responsibilities are carried out by the managers in each unit per reference 1.3.c.
- b) The Unit Director shall maintain a qualified station staff to conduct operations in accordance with the Fire Protection Program Plan and the technical specifications.
- c) The Unit Director shall ensure that required station procedures for implementation of the Fire Protection Program Plan are current and in effect.
- d) The Unit Director shall ensure that regulatory agencies are advised of all reportable occurrences.
- e) The Unit Director shall review the results of all inspections conducted in accordance with the Fire Protection Program Plan and those performed by insurance carriers and regulatory agencies.

### 3.2 MANAGER - PLANT ENGINEERING - UNIT I AND UNIT II

- a) The Manager - Plant Engineering provides technical support for station procurement to ensure that technical and quality assurance requirements are satisfied.

### 3.3 MANAGER - TRAINING

- a) The Manager - Training ensures that training procedures and lesson plans are provided for the station fire brigade and public fire department personnel in accordance with the Fire Protection Plan, and that the records of training are maintained

as required by the technical specifications.

- b) He incorporates the results of the annual review of the fire brigade training program.

#### 3.4 FIRE BRIGADE TRAINING COORDINATOR

- a) The Fire Brigade Training Coordinator is responsible for assisting the Emergency Planning Coordinator in carrying out the responsibility for fire drills.
- b) He evaluates Operations Departments' critiques of scheduled quarterly plant fire brigade drills in Unit I and Unit II. He shall ensure that fire drill critique sheets are completed by each drill observer.
- c) He maintains and coordinates that portion of General Employee Training concerning use of portable fire extinguishers and fire emergency notification procedures.
- d) He interfaces with station Health Physics personnel in providing radiation protection training for public fire department personnel.
- e) He maintains the training program by incorporating comments as the result of audits and reviews conducted in accordance with the Fire Protection Program Plan.
- f) The Fire Brigade Training Coordinator shall assist licensing in obtaining burning permits from DER (Department of Environmental Resources) to support the practice portion of fire brigade training.
- g) He is responsible for performing all phases of fire brigade instruction and shall maintain qualification as a state certified fire fighting instructor in order to provide the practical training required by the Fire Protection Program Plan. Further, he shall maintain the fire brigade training program such that it meets or exceeds the requirements of NFPA-27.

#### 3.5 EMERGENCY PLANNING COORDINATOR

- a) The Emergency Planning Coordinator schedules, with the Supervisor of Operations, and conducts at least one fire drill per year involving both the station fire brigade's and the public fire departments' participation, and a fire drill at least once a quarter for each operating shift.
- b) He coordinates the development of the fire drill scenario plan and drill critique evaluation for the annual drill with the Fire Brigade Training Coordinator and the Station Fire Protection Engineering Group.
- c) He is responsible for maintaining the agreements with the public fire departments, ambulance services, and hospitals to support the Emergency Plan, Reference f.
- d) He is responsible for ensuring that the Fire Protection Review Committee Chairman is made aware of the scenario and date for the annual drill.

### 3.6 STATION FIRE PROTECTION ENGINEERING GROUP

- a) This group provides technical support for the implementation of the Fire Protection Program Plan at the station level in the areas of operations, maintenance, engineering, inspection, training and procurement and reports to the Manager-Plant Engineering-Unit I and Unit II.
- b) The group reviews the Fire Protection Program Plan implementing procedures on an annual basis and initiates changes as required. This review is accomplished in accordance with AP 1001, Document Control.
- c) Those designs and modifications which are determined to have an impact on fire protection or directly effect the fire protection systems at the station, are presented by the design organization to the insurance carriers for review and acceptance. The group is responsible for resolving insurance carrier concerns and securing the concurrence of the FPPC. The resolved concerns are forwarded by the group to the design organization for implementation.
- d) This group shall function as the site lead engineering group with modifications which directly affect fire protection systems.
- e) The group shall maintain a log of open items requiring corrective action affecting station fire protection.
- f) The group reviews all fire protection system impairments, maintains a record of impairments, provides notifications to insurance carriers and tracks the impairments until restoration is made. Each unit control room maintains an impairment log and notifies the group as impairments occur. The group is responsible for determining backup protection requirements during impairments when additional capabilities are required by the insurance carriers, the technical specifications, or good fire protection.
- g) The group optimizes the effectiveness of public fire department support by providing technical assistance for the fire brigade and public fire department training programs.
- h) The group maintains and develops fire fighting pre-plan strategies for nuclear safety related areas in each unit and should develop fire fighting pre-plan strategies for non-nuclear safety related areas.
- i) The group shall prepare fire brigade bulletins for distribution to fire brigade members and the training department on plant modifications as they are completed if they impact the fire protection program.
- j) The group annually reviews the fire brigade training program and provides an evaluation of technical content to the Manager of Training.
- k) The Group should perform weekly station inspections of all permanent plant structures and as time permits, temporary



structures. The inspection results will be documented to track open items.

- 1) The group reviews the results of surveillance testing of the fire service system.

#### 4.0 FIRE BRIGADE

- a) The Station Fire Brigade is directed by the Shift Foreman. The Fire Brigade consists of five trained members from plant operations, maintenance, and health physics. Brigade members are assigned by watchbill at the start of each shift.
- b) The Station Fire Brigade receives training in practical fire fighting by an instructor certified by the state of Pennsylvania. Training in procedures, facilities, and theory is received from station training personnel, in classroom and visual aid presentations. Areas of concentration include annual reviews of:

- Alarm Responses - TMI station fire emergency plan & procedure
- Notification Procedures
- Pre-planned fire fighting strategies
- Design & operation of installed plant systems
- Modification to installed plant systems
- Portable fire fighting equipment
- Portable respiratory equipment
- Fire chemistry
- Plant fire hazards and fire classifications
- Correct selection of extinguishing mediums
- Use of water on electrical fires
- Inspection, maintenance, and testing of equipment
- Search and rescue techniques
- Use of turnout gear (Bunker clothing)
- Fire Brigade Command
- Communications and interface with public fire departments

- c) Fire drills of the station fire brigade are conducted quarterly for each operating shift.
- d) The fire brigade participates in at least one annual drill with local fire department participation-only the fire brigade on shift at the time of this drill participates.

#### 5.0 SUMMARY OF INSPECTIONS

Note: These are in addition to those required by Reference h., the Operational Quality Assurance Plan

- a) Weekly
  1. Station inspection to determine level of good fire protection by the Station Fire Protection Engineering Group.
- b) Annual
  1. An independent fire protection and loss prevention inspection

and audit performed utilizing either qualified offsite license personnel (Fire Protection Review Committee) or an outside fire protection firm. (Reference c. requirement)

2. Review of technical content and quality of fire brigade training program by the Station Fire Protection Engineering Group.
3. Review of the Fire Protection Program Plan and implementing procedures and initiation of revisions as necessary by the

c) Bi-Annual

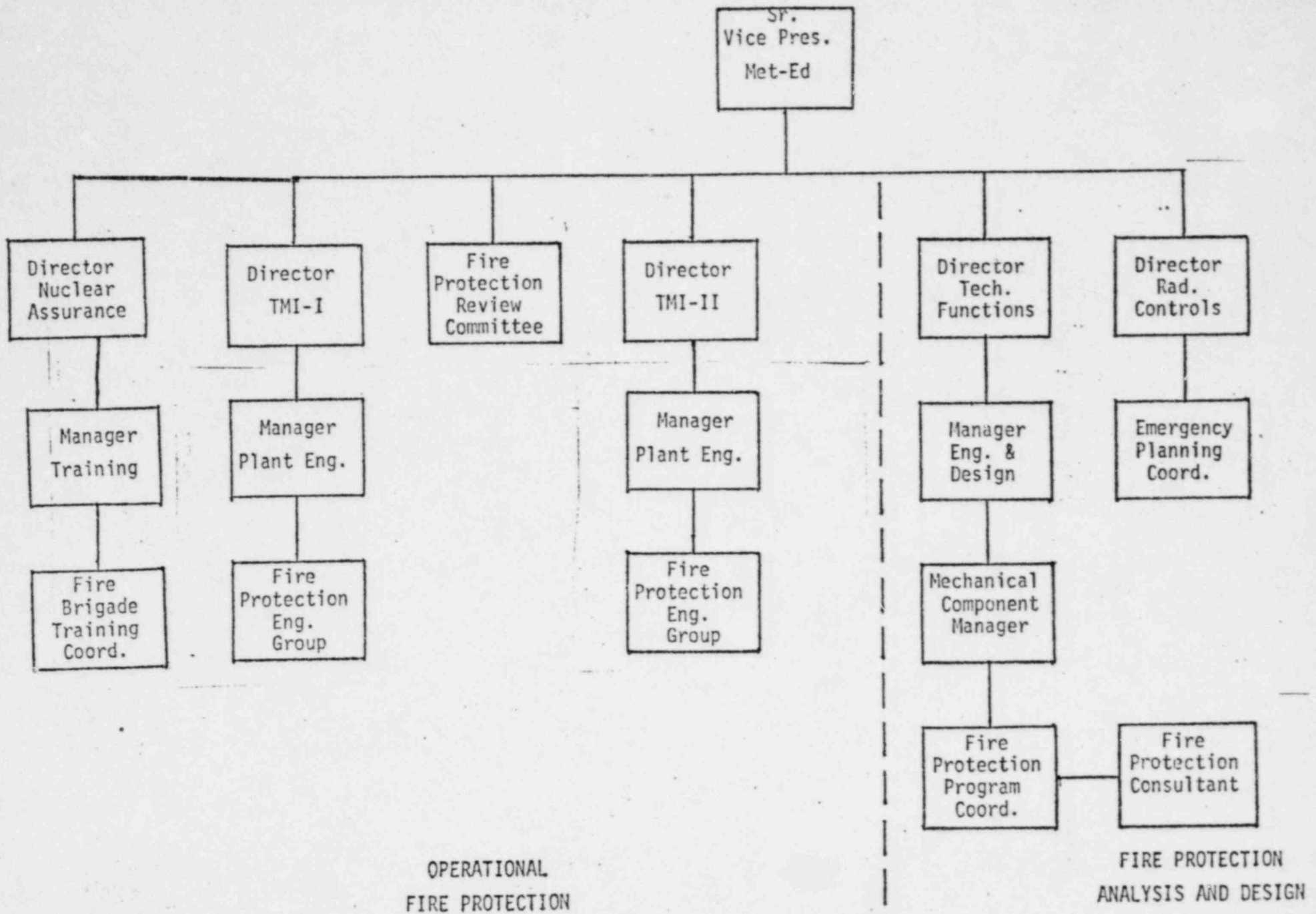
1. An audit performed under the cognizance of the Senior Vice President on the Fire Protection Program Plan and implementing procedures. (Reference c requirement)

d) Three years

1. An inspection and audit of the fire protection and loss prevention program by an outside qualified fire consultant coordinated by the Fire Protection Program Coordinator. (Reference c requirement)

## 6.0 IMPLEMENTING PROCEDURES

- a) Plant modification procedures.
- b) Corrective and preventative maintenance procedures related to fire protection systems and equipment and those controlling cutting and welding operations.
- c) Technical specification surveillance and Operation's surveillance program procedures related to fire protection systems and equipment.
- d) Station Emergency Plan, fire emergency and fire alarm response procedures.
- e) Fire protection system operating procedures
- f) Administrative procedures covering but not limited to house keeping inspection (AP 1008), the Fire Protection Program (AP 1038), Control of Transient and Combustible Materials (AP 1034 and AP 1035).



TMI GENERATION GROUP  
 FIRE PROTECTION ORGANIZATION