UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

December 30, 1985

MEMORANDUM FOR: Richard H. Vollmer, Deputy Director
Office of Inspection and Enforcement

FROM: William T. Russell, Director
Division of Human Factors Technology
Office of Nuclear Reactor Regulation

SUBJECT: GENERIC LETTER ON FIRE PROTECTION

The Technical Specifications Coordination Branch has reviewed the latest draft of the Generic Letter on Fire Protection and recommends the changes noted in Enclosure 1. These changes are being proposed to make the Generic Letter more consistent with the approach being taken for the Perry operating license as shown in Enclosure 2.

Requirements which have in the past been implemented through Technical Specifications are instead at Perry being implemented through Surveillance and Administration Procedures. The FSAR changes proposed for Perry did not incorporate the Technical Specifications requirements, but rather provided a general reference to the existence of procedures that address those matters and incorporate the Fire Protection Evaluation Report by reference. By these references, 10 CFR 50.59 becomes applicable to the fire protection program at Perry.

The administrative controls included in the Perry Technical Specifications were also modified as noted in Enclosure 3. These changes included the addition of the fire protection program under the administrative responsibi ities of the PORC, similar to the existing requirements of the Emergency and Security plans, as well as under the Procedures/Instructions and Program requirements of the Technical Specifications. The Audit requirements of the Technical Specifications retained those requirements that are applicable to the fire protection programmatic controls, protection equipment and program implementation.

The Perry Technical Specifications will retain the requirements related to Remote Shutdown (3/4.3.7.4) without change. However, the remaining fire protection sections, exclusive of the above changes to administrative controls, will be removed from the Technical Specifications. While the remote shutdown features are applicable to control room habitability as well as certain fire scenarios, the retention of their Technical Specification requirements eliminate the use of 50.59 as a means to alter this aspect of fire protection considerations. Thus, there may be a valid case to be made that alternate or dedicated shutdowns features, where provided in response to the requirements of Appendix R, should also be

addressed by Technical Specifications requirements, notwithstanding the proposed eliminations of specific existing fire protection Technical Specifications.

In summary, it is concluded that it would be more appropriate for the generic letter on fire protection to note that the modification of fire protection Technical Specifications is a matter which is under staff review and that guidelines for such actions will be forthcoming. Enclosure 1 has been marked up accordingly. The Technical Specification Coordination Branch is currently developing an NRR proposal for changes to fire protection system Technical Specifications for operating reactors as a part of the overall NRR Technical Specification improvement effort. At this time there are a number of considerations, some of which are noted above, which must be addressed and this matter need not be resolved prior to the issuance of the proposed generic letter.

W T Russell

William T. Russell, Director
Division of Human Factors Technology
Office of Nuclear Reactor Regulation

Enclosures:
As Stated

cc w/encls:
H. Denton, NRR
D. Eisenhut, NRR
V. Stello, EDO

amendment to the operating license which [deletes] amends [the present] any current license conditions regarding [the] fire protection [program] and [completed fire protection features. Inclusion of the fire protection program in the FSAR will be a prerequisite for licensing for all applications now under review. No license condition would then be required.] substitutes the following standard condition:

> 1. The licensee shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report for the facility (or as described in submittals dated ---------) and as approved in the SER dated ---------(and Supplements dated ---------) subject to the following provision.
>
> 2. The licensee may not make changes to the approved fire protection program which would adversely affect the ability to achieve and maintain safe shutdown in the event of a fire without prior approval of the Commission.

The licensee may alter specific features of the approved program provided (a) such changes do not otherwise involve a change in a license condition or technical specification or result in an unreviewed safety question (see 10 CFR 50.59), and (b) such changes do not result in failure to complete the fire protection program as approved by the Commission. As with other changes implemented under 10 CFR 50.59, the licensee shall maintain, in auditable form, a current record of all such changes, including an analysis of the effects of the change on the fire protection program, and shall make such records available to NRC inspectors upon request. All changes to the approved program shall be reported annually to the Director of the Office of Nuclear Reactor Regulation, along with the FSAR revisions required by 10 CFR 50.71(e).

Temporary changes to specific ~~fire protection~~ features which may be ~~necessary~~ to accomplish ~~maintenance~~ or modifications are acceptable provided interim compensatory measures are implemented. ← (ADDRESSED BY CURRENT TECH SPECS

~~At the same time the licensee may request an amendment to delete the technical specifications that will now be unnecessary.~~ If licensees fail to request amendments to their licenses to add this condition, the Commission will consider whether such changes should be required by order or by rule.

Inclusion of the fire protection program in the FSAR will be a prerequisite for licensing for all applications now under review. The standard license condition will be included in new licenses.

[INSERT] per attached

ENCLOSURE 1

Two points should be noted in regard to these conditions: (1) they did not explicitly cover required fire protection features where modifications to the existing plant configuration or procedures were not required, and (2) some of the provisions in these conditions may have been superseded by Sections III.G, J, O, and L of Appendix R.

License conditions for plants licensed after January 1, 1979 vary widely in scope and content. Some only list open items that must be resolved by a specified date or event, such as exceeding five percent power or the first refueling outage. Some reference a commitment to meet Appendix R; some reference the FSAR and/or the NRC staff's SER. These variations have created problems for licensees and for NRC inspectors in identifying the operative and enforceable fire protection requirements at each facility.

These license conditions also create difficulties because they do not specify when a licensee may make changes to the approved program without requesting a license amendment. If the fire protection program committed to by the licensee is required by a specific license condition or is not part of the FSAR for the facility, the provisions of 10 CFR 50.59 may not be applied to make changes without prior NRC approval. Thus licensees may be required to submit amendment requests even for relatively minor changes to the fire protection program.

The aforementioned problems, in general, exist because of the many submittals that constitute the fire protection program for each plant. The Commission believes that the best way to resolve these problems is to incorporate the fire protection program, including the fire hazards analysis ~~and the fire protection Technical Specifications~~, into the Final Safety Analysis Report (FSAR) for the facility. In this manner, the fire protection program, including the systems, the administrative ~~and technical~~ controls, the organization, and other plant features associated with fire protection would be on a consistent status with other plant features described in the FSAR. Also, the provisions of 10 CFR 50.59 would then apply directly for changes the licensee desires to make in the fire protection program. In this context, the determination of the involvement of an unreviewed safety question defined in §50.59(a)(2) would be made based on the "accident....previously evaluated" being the postulated fire in the fire hazards analysis for the fire area affected by the change. The Commission also believes that a standard license condition, requiring licensees to comply with the provisions of the fire protection program as described in the FSAR, should be used to ensure uniform enforcement of fire protection requirement

Therefore, each licensee should include, in the FSAR update required by 10 CFR 50.71(e) that will fall due more than 6 months after the date of this letter, the incorporation of the fire protection program that has been approved by the NRC, including the fire hazards analysis that forms the basis for the fire protection program ~~and the fire protection Technical Specifications~~. This incorporation may be by reference to specific previous submittals and the NRC approvals where appropriate. Upon completion of this effort, including the certification required by 10 CFR 50.71(e)(2), the licensee may apply for an

amendment to the operating license which [deletes] amends [the present] any current license conditions regarding [the] fire protection [program] and [completed fire protection features. Inclusion of the fire protection program in the FSAR will be a prerequisite for licensing for all applications now under review. No license condition would then be required.] substitutes the following standard condition:

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Inclusion of the fire protection program in the FSAR will be a prerequisite for licensing for all applications now under review. The standard license condition will be included in new licenses.

[INSERT] per attached

(INSERT)

With the addition of the fire protection program to the FSAR, as noted above, the Staff finds that a significant reduction in the content of fire protection technical specifications is appropriate. As a consequence, additional guidance will be provided to licensees and applicants in the near future on the content of plant specific proposals to request such action.

ENCLOSURE 2

THE CLEVELAND ELECTRIC ILLUMINATING COMPANY
P.O. BOX 5000 - CLEVELAND, OHIO 44101 - TELEPHONE (216) 622-9800 - ILLUMINATING BLDG. - 55 PUBLIC SQUARE
Serving The Best Location in the Nation

MURRAY R. EDELMAN
VICE PRESIDENT
NUCLEAR

November 15, 1985
PY-CEI/NRR-0393 L

Mr. B. J. Youngblood, Chief
Licensing Branch No. 1
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Perry Nuclear Power Plant
Docket Nos. 50-440; 50-441
Fire Protection Program
FSAR and Technical
Specification Changes

Dear Mr. Youngblood:

During recent discussions with your staff, we were requested to evaluate the concept of concurrently amending the FSAR, by incorporating our Fire Protection Evaluation Report (FPER) into FSAR Chapter 9, and removing the fire protection elements from the Perry Technical Specifications. In addition to adding the FPER into the FSAR, this will entail a shifting of fire protection testing requirements from surveillance instructions (SVI's) to periodic test instructions (PTI's). This will, in effect, transfer fire protection program commitments, reporting requirements and amendments from the jurisdiction of 10CFR50.73 and 10CFR50.90 to 10CFR50.59 and 10CFR50.71(e). The PNPP Fire Protection Program will be completely described and controlled through the FSAR rather than through the combination of FPER, FSAR and Technical Specifications. This will be consistent with the recommendations of the Committee to Review Generic Requirements (CRGR).

The fire protection program in place at PNPP meets the requirements of existing Technical Specifications. With relatively straightforward changes, incorporation of the total fire protection program into the FSAR as recommended by CRGR can be accomplished by fuel load. We endorse this approach and believe this is a significant improvement in the fire protection program. Based on further discussions with the staff, we have begun implementing this change.

The attachments to this letter provide a detailed discussion of the existing and modified fire protection programs, a revised FSAR discussion of the inspection and administrative programs, and a tabulation of the existing Periodic Test and Surveillance Instructions.

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With these revisions, the PNPP Fire Protection Program commitments will be totally defined within the revised FSAR Section 9.5-1 and the new FSAR Appendix 9A (i.e., the current FPER). Previously defined Technical Specification requirements will be embodied within the implementing procedures and instructions of the Operations Manual. Thus, this effort will result in an effective PNPP Fire Protection Program which is acceptable to the staff, and will enable PNPP Technical Specifications to be issued excluding fire protection elements prior to certification. If you should have any questions, please feel free to call.

Very truly yours,

Murray R. Edelman
Vice President
Nuclear Group

MRE:njc

Attachments
cc: Jay Silberg, Esq.
John Stefano (2)
J. Grobe

We propose that the Remote Shutdown (3/4.3.7.4) feature of the Technical Specifications be retained without any changes. The remaining fire protection associated sections listed above will be removed from the Technical Specifications. The existing Perry Surveillance Instructions implementing sections 3/4.7.6, 3/4.7.7 and 3/4.3.7.8 will be retained by converting them to Periodic Test Instructions. The limiting conditions and remedial action portions of these same sections will be re-established by expanding an existing Plant Administrative Procedure, PAP-1921 "Fire Barrier Removal" and writing a new Plant Administrative Procedure, PAP-1923, "Actions on Inoperable Fire Protection Systems." An equivalent level of limiting conditions, and actions to be taken will be established within these procedures to provide an equivalent level of protection as described in the existing Technical Specifications.

The Administrative portion of Technical Specifications 6.2.2(e) and 6.5.2.8,(e)(f)) are invoked by PAP-1911 and the Operations Quality Assurance Plan, Appendix G. No change is required to these documents, other than removing the references to Technical Specifications. In addition, the entire series of Perry Administrative Procedures (PAP-1910 through PAP-1922) will be retained, as they implement our overall plant Fire Protection Program in addition to our commitments presently discussed in the FPER.

As previously indicated, CEI presently has in-place all of the documents/ procedures to implement Technical Specification requirements for fire protection. By fuel load, CEI will have in-place the new procedure, PAP-1923, which replaces existing Technical Specification requirements for active systems and will have prepared changes to our procedures as required to effect all the other aspects of rearrangement.

Attachment
PY-CEI/NRR-0393 L

Description of the Existing and Proposed PNPP Fire Protection Programs

Existing

The existing Fire Protection Program is complete and has all of the implementing features of the controlling documents in place. This program consists of:

(1) FSAR Section 9.5.1
(2) Fire Protection Evaluation Report (FPER)
(3) Technical Specification Sections

o	3/4.3.7.8	Fire Detection
o	3/4.7.6	Fire Suppression Systems
o	3/4.7.7	Fire Rated Assemblies
o	6.2.2(e)	Fire Brigade
o	6.5.2.8(e) and (f)	Administrative QA for Fire Protection

(4) Surveillance Instructions (List Attached)
(5) Periodic Test Instructions (List Attached)
(6) Administrative Procedures (List Attached)
(7) Plant Operating Procedure POP-0210
(8) OQA Plan, Appendix G

Perry Operations Procedure, POP-0210, establishes the Fire Protection Program and Plant Administrative Procedures PAP-1910 through 1922 implement the various features of fire protection according to CMEB BTP 9.5-1 and 10CFR50 Appendix R. FSAR Section 9.5-1 provides a general discussion of fire protection/detection/suppression features and invokes the FPER.

The FPER includes a fire hazards analysis, safe shutdown summary, deviations, and comparison tables to 10CFR50 Appendix R and BTP APCSB 9.5-1, Appendix A. At Perry, the FPER has been handled as an extension of the FSAR similar to the Emergency Plan. Surveillance Instructions implement the Technical Specification Sections for surveillance. Periodic Test Instructions cover the surveillances in areas of the program not in Technical Specifications and include the requirements of the ANI. These are listed on the attached pages.

Proposed Rearrangement

The FPER in its entirety will be placed into the FSAR as Appendix 9A, and become Volume 14A. The only substantive changes to the FPER contents will be the incorporation of material that was scheduled for FPER Revision 5.

FSAR Section 9.5.1.4 will be amended by incorporating a discussion of fire protection operations, testing and surveillances. As shown in the attachment, information provided addresses plant administrative procedures, periodic testing and remedial actions for inoperability.

TABLE 1
FIRE PROTECTION
PRESENT PLANT ADMINISTRATIVE PROCEDURES

PAP-1910	FIRE PROTECTION PROGRAM
PAP-1911	FIRE EMERGENCY
PAP-1912	BURN PERMITS FOR IGNITION SOURCES
PAP-1913	CONTROL OF TRANSIENT COMBUSTIBLES
PAP-1914	IMPAIRMENT OF FIRE PROTECTION SYSTEMS
PAP-1915	FIRE REPORT
PAP-1916	DUTIES OF FIRE WATCH
PAP-1917	FIRE PROTECTION TRAINING PROGRAMS
PAP-1918	FIRE DRILLS
PAP-1919	FIRE BRIGADE EQUIPMENT, INVENTORY, INSPECTION AND MAINTENANCE
PAP-1920	PERIODIC FIRE INSPECTIONS
PAP-1921	FIRE BARRIER REMOVAL
PAP-1922	PRE-FIRE PLANS
PAP-1923	ACTIONS ON INOPERABLE FIRE PROTECTION SYSTEMS

TABLE 2
FIRE PROTECTION
SURVEILLANCE INSTRUCTIONS

SVI-P54-T0351	UNIT 1 CONTROL ROOM FIRE DETECTION INSTRUMENTATION CHANNEL FUNCTIONAL TEST FOR HONEYWELL 938 PANELS
SVI-P54-T1277	ELECTRIC MOTOR DRIVEN FIRE PUMP OPERABILITY TEST
SVI-P54-T1278	FIRE SUPPRESSION SYSTEM VALVE POSITION VERIFICATION
SVI-P54-T1280	FIRE SUPPRESSION VALVE CYCLE TEST
SVI-P54-T1281	FIRE SUPPRESSION WATER SYSTEM SIMULATED AUTOMATIC ACTUATION TEST
SVI-P54-T1282	FIRE SUPPRESSION YARD MAIN WATER FLOW TEST
SVI-P54-T1283	DIESEL FIRE PUMP RUN & START
SVI-P54-T1284	HYDRANT HOSE HOUSE MONTHLY INSPECTION
SVI-P54-T1285	FIRE HYDRANT SEMIANNUAL INSPECTION
SVI-P54-T1286	ANNUAL HYDRANT HOSE HOUSE INSPECTION & HYDRANT FLOW VERIFICATION
SVI-P54-T1287	DIESEL FIRE PUMP WEEKLY BATTERY CHECKOUT
SVI-P54-T1288	DIESEL FIRE PUMP BATTERY SPECIFIC GRAVITY CHECK
SVI-P54-T1289	DIESEL DRIVEN FIRE PUMP BATTERY INSPECTION
SVI-P54-T1290	SPRINKLER HEADER AND NOZZLE SPRAY AREA INSPECTION
SVI-P54-T1291	WATER SPRAY, PRE-ACTION SPRINKLER, AND AUTOMATIC SPRINKER SYSTEMS FUNCTIONAL TEST
SVI-P54-T1293	CHARCOAL FILTER BED SPRAY NOZZLE VISUAL INSPECTION
SVI-P54-T1294	CO_2 SYSTEM VALVE POSITION VERIFICATION
SVI-P54-T1295	CO_2 STORAGE TANK PRESSURE AND CAPACITY VERIFICATION
SVI-P54-T1296-A	CO_2 SYSTEM OPERABILITY TEST FOR UNIT 1 DIESEL GENERATOR ROOMS

SVI-P54-T1296-B	CO_2 SYSTEM OPERABILITY TEST FOR UNIT 1 CONTROL ROOM
SVI-P54-T1298	UNIT 1 FIRE DETECTION FUNCT FOR DELUGE CONTROL PANELS (1H52-P209, 1H51-P210) HEAT DETECTORS
SVI-P54-T1299	UNIT 1 FIRE DETECTION INSTRUMENTATION CHANNEL FUNCTIONAL TEST FOR DET-RONICS PANELS
SVI-P54-T1300	UNIT 1 FIRE DETECTION INSTRUMENTATION CHANNEL FUNCTIONAL FOR HONEYWELL W939 SINGLE ZONE PANELS
SVI-P54-T1301	UNIT 1 FIRE DETECTION INSTRUMENTATION CHANNEL FUNCTIONAL TEST FOR PYROTRONICS PANELS
SVI-P54-T1302	UNIT 1 FIRE DETECTION INSTRUMENTATION CHANNEL FUNCTIONAL TEST FOR FIRETEK 240 PANELS
SVI-P54-T1303	UNIT 1 FIRE DETECTION INSTRUMENTATION CHANNEL FUNCTIONAL TEST FOR HONEYWELL 938 PANELS
SVI-P54-T1304	UNIT 1 FIRE DETECTION INSTRUMENTATION CHANNEL FUNCTION TEST FOR CHEMETRON PANELS
SVI-P54-T1305	FIRE HOSE STATION MONTHLY INSPECTION
SVI-P54-T1306	FIRE HOSE STATION EIGHTEEN (18) MONTH INSPECTION
SVI-P54-T1307	FIRE HOSE OPERABILITY TEST
SVI-P54-T1310	PENETRATION SEAL VISUAL INSPECTION
SVI-P54-T1311	FIRE DAMPER VISUAL INSPECTION
SVI-P54-T1312	FIRE BARRIER VISUAL INSPECTION
SVI-P54-T1313	FIRE DOOR SUPERVISORY SYSTEM FUNCTIONAL TEST
SVI-P54-T1314	LOCKED FIRE DOOR WEEKLY VERIFICATION
SVI-P54-T1315	UNLOCKED AND UNSUPERVISED FIRE DOOR DAILY VERIFICATION
SVI-P54-T1316	SEMIANNUAL FIRE DOOR LATCH INSPECTION
SVI-P54-T1317	MAGNETICALLY HELD OPEN FIRE DOOR OPERABILITY TEST
SVI-P54-T2002	RX RECIRC PUMP FIRE SERVICE CO_2 VLV OPERABILITY TEST

SVI-P54-T3014	DIESEL FIRE PUMP FUEL ANALYSIS
SVI-P54-T5035	DIESEL INSPECTION
SVI-P54-T9210	TYPE C LOCAL LEAK RATE TEST OF P54 PENETRATION P210
SVI-P54-T9406	TYPE C LOCAL LEAK RATE TEST OF P54 PENETRATION P406

NOTE: To Be Rewritten as Periodic Test Instructions

TABLE 3
FIRE PROTECTION
PRESENT PERIODIC TEST INSTRUCTIONS

PTI-P54-P0001	FIRE HOSE STATION INSPECTION
PTI-P54-P0002	FIRE HOSE STATION 18 MONTH INSPECTION
PTI-P54-P0003	FIRE MAIN FLOW TEST
PTI-P54-P0004	FIRE HYDRANT OPERABILITY TEST
PTI-P54-P0005	FIRE HOSE HYDROSTATIC TEST
PTI-P54-P0006	PORTABLE FIRE EXTINGUISHERS MONTHLY INSPECTION
PTI-P54-P0007	PORTABLE FIRE EXTINGUISHERS MAINTENANCE INSPECTION
PTI-P54-P0008	FIRE SUPPRESSION SYSTEM (WATER) VALVE LINEUP & INTEGRITY INSPECTION
PTI-P54-P0009	WATER SPRAY SYSTEM MONTHLY OPERABILITY TEST
PTI-P54-P0010	WET PIPE SPRINKLER SYSTEMS MONTHLY OPERABILITY TEST
PTI-P54-P0011	PREACTION SPRINKLER SYSTEMS OPERABILITY TEST
PTI-P54-P0013-A	WATER SPRAY SYSTEM FLOW TEST FOR UNIT 1 & 2 STARTUP TRANSFORMERS, AND UNIT 1 AND 2 INTERBUS TRANSFORMERS
PTI-P54-P0013-B	WATER SPRAY SYSTEM FLOW TEST FOR MAIN TRANSFORMERS, AUXILIARY TRANSFORMER AND ISO-PHASE BUS DUCT (UNIT 1)
PTI-P54-P0014	PREACTION SPRINKLER SYSTEMS ANNUAL TRIP TEST
PTI-P54-P0015	FIRE DETECTION FUNCTIONAL TEST
PTI-P54-P0016	CARBON DIOXIDE SYSTEMS WEEKLY STORAGE TANK CAPACITY VERIFICATION
PTI-P54-P0017	CARBON DIOXIDE FIRE PROTECTION SYSTEM VALVE LINEUP INSTRUCTION
PTI-P54-P0018	CARBON DIOXIDE FIRE EXTINGUISHING SYSTEM PUFF TEST

PTI-P54-P0020	HALON STORAGE TANK LEVEL VERIFICATION
PTI-P54-P0022	FIRE DAMPER OPERABILITY TEST
PTI-P54-P0023	YARD VALVES, HYDRANTS, HOSE & HOSE HOUSE EQUIPMENT MONTHLY INSPECTION VERIFICATION
PTI-P54-P0025	WATER SPRAY SYSTEM FLOW TEST FOR UNIT 1, HYDROGEN SEAL OIL UNIT
PTI-P54-P0029	FIRE HYDRANT SEMIANNUAL INSPECTION
PTI-P54-P0030	CO_2 SYSTEM 18 MONTH OPERABILITY TEST
PTI-P54-P0031	18 MONTH HALON SYSTEM TEST

Drawings E-023-001 through E-203-034, provided in the FPER, show fire barriers, fire detection equipment, fire suppression equipment, and locations of equipment, instruments and cable associated with safe shutdown operations.

Figures 9.5-1 through 9.5-6 show the following:

a. Fire pumps and pressure maintenance components.
b. Underground distribution piping arrangements.
c. Internal distribution piping arrangement.
d. Hose stations.
e. Fire suppression systems.

Section 4.0 of the FPER provides the following information for each area/zone:

a. A listing of all mechanical and electrical equipment that affects the safe shutdown operation.
b. A list of both permanent and reasonably expected transient combustibles.
c. Type of fire detection system provided.
d. Types of fire suppression equipment (primary and backup).
e. The effect of the postulated fire on the capabiltiy to safety shut down the reactor and on the potential release of radioactive material.

9.5.1.4 Inspection and Testing Requirements

Administrative controls are provided through existing Plant Administrative Procedures, Perry Operating Procedures and the Operations Quality Assurance Program to ensure that the Fire Protection Program and equipment is properly maintained. This includes QA audits of the program implementation, conduct of periodic test inspections, and remedial actions for systems and barriers out of service. This program emphasizes those elements of fire protection that are associated with safe shutdown as described in Appendix 9A and their significance when evaluating program and equipment deficiences.

All fire protection equipment and systems are subject to a complete inspection and acceptance test in accordance with the National Fire Codes after installation is completed. After the plant is in operation, periodic

inspections and tests will be conducted as defined by the Fire Protection Program and National Fire Codes.

The following fire protection features will be subjected to periodic tests and inspections:

a. Fire alarm and detection systems
b. Wet pipe automatic sprinkler systems
c. Water spray systems
d. Preaction water spray systems
e. Preaction sprinkler systems
f. Carbon dioxide total flooding systems
g. Local application carbon dioxide systems
h. Foam application system
i. Fire pumps
j. Fire barriers (walls, fire doors, penetration seals, fire dampers)
k. Manual suppression (fire hoses, hydrants, extinguishers)

Equipment out of service including fire suppression, detection, and barriers will be controlled through the administrative program and appropriate remedial actions taken. The program requires all impairments to fire protection system to be identified and appropriate notification given to the Fire Protection Engineer for evaluation. Based on the condition, engineering analysis may be required to determine the extent of the fire hazard to safe plant operations. As conditions warrant remedial actions would include compensatory measures to ensure equivalent level of fire protection in additions to timely efforts to effect repairs and restore equipment to service.

9.5.1.5 Personnel Qualification and Training

The responsibility for the design, system equipment selection and development of test specifications for the completed physical aspects of the fire protection system is delegated to the fire protection consultant, Gilbert Associates, Inc., Reading, Pennsylvania. These responsibilities will be conducted by or under the direct supervision of an engineer who is qualified for Member grade in the Society of Fire Protection Engineers.

The development of the plant fire protection program is the responsibility of the Fire Protection Staff. This staff is composed of personnel prepared by training and experience in fire protection and personnel trained and experienced in nuclear plant safety to provide a balanced approach in directing the fire protection program.

Additional references to fire training can be found in Section 13.2.5. Specific administrative procedures, emergency plans, maintenance and testing procedures and drills will be described in the PNPP Operations Manual.

ENCLOSURE 3

FINAL DRAFT

6.1 RESPONSIBILITY

6.1.1 The Manager, Perry Plant Operations Department, shall be responsible for overall unit operation and shall delegate in writing the succession to this responsibility during his absence.

6.1.2 The Shift Supervisor or, during his absence from the control room, a designated individual shall be responsible for the control room command function. A management directive to this effect, signed by the Vice President - Nuclear Group shall be reissued to all station personnel on an annual basis.

6.2 ORGANIZATION

CORPORATE

6.2.1 The corporate organization for unit management and technical support shall be as shown on Figure 6.2.1-1.

UNIT STAFF

6.2.2 The unit organization shall be as shown on Figure 6.2.2-1 and:

a. Each on duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.2.2-1;

b. At least one licensed Operator shall be in the control room when fuel is in the reactor. In addition, while the unit is in OPERATIONAL CONDITION 1, 2 or 3, at least one licensed Senior Operator shall be in the control room;

c. A Health Physics Technician* shall be on site when fuel is in the reactor;

d. ALL CORE ALTERATIONS shall be observed and directly supervised by either a licensed Senior Operator or licensed Senior Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation;

e. A site fire brigade of at least five members shall be maintained on site at all times*. The fire brigade shall not include the Shift Supervisor, the Shift Technical Advisor, nor the two other members of the minimum shift crew necessary for safe shutdown of the unit and any personnel required for other essential functions during a fire emergency; and

*The Health Physics Technician ~~and fire brigade composition~~ may be less than the minimum requirements for a period of time not to exceed 2 hours, in order to accommodate unexpected absence, provided immediate action is taken to fill the required positions.

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RESPONSIBILITIES

6.5.1.6 The PORC shall be responsible for:

a. Review of all Administrative Procedures;

b. Review of the safety evaluations for (1) proposed procedures/instructions, (2) changes to procedures/instructions, equipment, systems or facilities, and (3) tests or experiments performed under the provisions of 10 CFR 50.59 to verify that such actions do not constitute an unreviewed safety question;

c. Review of proposed procedures/instructions and changes to procedures/instructions, equipment, systems or facilities which involve an unreviewed safety question as defined in 10 CFR 50.59;

d. Review of proposed tests or experiments which involve an unreviewed safety question as defined in 10 CFR 50.59;

e. Review of proposed changes to Technical Specifications or the Operating License;

f. Investigation of all violations of the Technical Specifications including the preparation and forwarding of reports covering evaluation and recommendations to prevent recurrence to the Vice President - Nuclear Group and to the Nuclear Safety Review Committee;

g. Review of all REPORTABLE EVENTS;

h. Review of the plant Security Plan and Security Contingency Instructions and submittal of recommended changes to the Nuclear Safety Review Committee;

i. Review of the Emergency Plan and implementing instructions and submittal of recommended changes to the Nuclear Safety Review Committee;

j. Review of changes to the PROCESS CONTROL PROGRAM, the OFFSITE DOSE CALCULATION MANUAL, and Radwaste Treatment Systems;

k. Review of any accidental, unplanned or uncontrolled radioactive release including the preparation of reports covering evaluation, recommendations, and disposition of the corrective action to prevent recurrence and the forwarding of these reports to the Managers, Perry Plant Departments, the Nuclear Safety Review Committee and the Vice President - Nuclear Group;

l. Review of Unit operations to detect potential hazards to nuclear safety; ~~and~~

m. Investigations or analysis of special subjects as requested by the Chairman of the Nuclear Safety Review Committee; and

n. Review of the Fire Protection Program and implementing instructions and submittal of recommended changes to the Nuclear Safety Review Committee.

AUDITS (Continued)

d. The performance of activities required by the Operational Quality Assurance Program to meet the criteria of Appendix B, 10 CFR Part 50, at least once per 24 months;

e. The fire protection programmatic controls including the implementing procedures at least once per 24 months by qualified licensee QA personnel;

f. The fire protection equipment and program implementation at least once per 12 months utilizing either a qualified corporate licensee fire protection engineer(s) or an outside independent fire protection consultant. An outside independent fire protection consultant shall be utilized at least every third year;

g. The radiological environmental monitoring program and the results thereof at least once per 12 months;

h. The OFFSITE DOSE CALCULATION MANUAL and implementing procedures at least once per 24 months;

i. The PROCESS CONTROL PROGRAM and implementing procedures at least once per 24 months;

j. The performance of activities required by the Quality Assurance Program for effluent and environmental monitoring at least once per 12 months; and

k. Any other area of unit operation considered appropriate by the NSRC or the Vice President - Nuclear Group.

RECORDS

6.5.2.9 Records of NSRC activities shall be prepared, approved, and distributed as indicated below:

a. Minutes of each NSRC meeting shall be prepared, approved, and forwarded to the Vice President - Nuclear Group within 14 days following each meeting.

b. Reports of reviews encompassed by Specification 6.5.2.7 shall be prepared, approved, and forwarded to the Vice President - Nuclear Group within 14 days following completion of the review.

c. Audit reports encompassed by Specification 6.5.2.8 shall be forwarded to the Vice President - Nuclear Group and to the management positions responsible for the areas audited within 30 days after completion of the audit by the auditing organization.

6.8 PROCEDURES/INSTRUCTIONS AND PROGRAMS

6.8.1 Written procedures/instructions shall be established, implemented, and maintained covering the activities referenced below:

a. The applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978.

b. The applicable procedures required to implement the requirements of NUREG-0737 and supplements thereto.

c. Security Plan implementation.

d. Emergency Plan implementation.

e. PROCESS CONTROL PROGRAM implementation.

f. OFFSITE DOSE CALCULATION MANUAL implementation.

g. ~~Quality Assurance Program for effluent and~~ environmental monitoring.

h. FIRE PROTECTION PROGRAM implementation

* 6.8.2 ~~Each administrative procedure of Specification~~ 6.8.1, and changes thereto, shall be reviewed by the PORC and shall be approved by the Managers, Perry Plant Departments, prior to implementation. All procedures/instructions shall be reviewed periodically as set forth in administrative procedures.

6.8.3 The following programs shall be established, implemented, and maintained:

a. Primary Coolant Sources Outside Containment

A program to reduce leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. The systems include the HPCS, CS, RHR, RCIC, LPCS, feedwater leakage control system, and post-accident sampling systems. The program shall include the following:

1. Preventive maintenance and periodic visual inspection requirements, and

2. Integrated leak test requirements for each system at refueling cycle intervals or less.

b. In-Plant Radiation Monitoring

A program which will ensure the capability to accurately determine the airborne iodine concentration in vital areas under accident conditions. This program shall include the following:

1. Training of personnel,

2. Procedures for monitoring, and

3. Provisions for maintenance of sampling and analysis equipment.