ATTACHMENT A

Revise the technical speci . ions as follows:

Remove Pages	Insert Pages
3/4 3-46	3/4 3-46
3/4 3-47	-
3/4 3-48	-
3/4 3-48a	-
3/4 7-35	-
3/4 7-36	-
3/4 7-37	-
3/4 7-38	-
3/4 7-39	-
3/4 7-40	-
3/4 7-41	-
3/4 7-42	-
3/4 7-43	-
3/4 7-44	-
3/4 7-45	-
B 3/4 3-3	B 3/4 3-3
B 3/4 7-7	B 3/4 7-7
6-2	6-2
6-5	6-5
6-23	6-23
License Condition 2.C(5)	Revised License Condition 2.C(5)

TABLE 4.3-6

REMOTE SHUTDOWN MONITORING INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

INSTRUMENT	CHANNEL CHECK	CHANNEL CALIBRATION
1. Intermediate Range Nuclear Flux	M	N.A.
2. Intermediate Range Startup Rate	M	N.A.
3. Source Range Nuclear Flux (1)	M (4)	N.A.
4. Source Range Startup Rate (1)	M (4)	N.A.
5. Reactor Coolant Temperature - Hot Leg	M	R
6. Reactor Coolant Temperature - Cold Leg	M	R
7. Pressurizer Pressure	M	R
8. Pressurizer Level	M	R
9. Steam Generator Pressure	M	R
10. Steam Generator Level	M	R
11. RHR Temperature - HX Outlet (3)	M (5)	R
12. Auxiliary Feedwater Flow Rate	S/U (2)	R

Notation

(1) Operability required in accordance with Specification 3.3.1.1.
(2) Channel check to be performed in conjunction with Surveillance Requirement 4.7.1.2.a.9 following an extended plant outage.
(3) Operability required in accordance with Specification 3.4.1.3.
(4) Below P-6.
(5) Channel check to be performed in conjunction with Surveillance Requirement 4.4.1.3.1.

3/4.3.3.5 REMOTE SHUTDOWN INSTRUMENTATION

The OPERABILITY of the remote shutdown instrumentation ensures that sufficient capability is available to permit shutdown and maintenance of HOT STANDBY of the facility from locations outside of the control room. This capability is required in the event control room habitability is lost and is consistent with General Design Criteria 19 of 10 CFR 50.

3/4.3.3.7 CHLORINE DETECTION SYSTEMS

The OPERABILITY of the chlorine detection system ensures that sufficient capability is available to promptly detect and initiate protective action in the event of an accidental chlorine release. The chlorine detection system will protect the control room operators by initiating control room isolation in a timely manner to assure the chlorine concentration in the control room does not exceed the toxicity limit of 15 ppm by volume within 2 minutes following detection. This capability is required to protect control room personnel and is consistent with the recommendations of Regulatory Guide 1.95, "Protection of Nuclear Power Plant Control Room Operators Against an Accidental Chlorine Release," February 1975.

3/4.3.3.8 ACCIDENT MONITORING INSTRUMENTATION

The OPERABILITY of the accident monitoring instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess these variables during and following an accident. This capability is consistent with the recommendations of Regulatory Guide 1.97, "Instrumentation for Light-Water-Cooled Nuclear Plants to Assess Plant Conditions During and Following an Accident," December 1975 and NUREG-0578, "TMI-2 Lessons Learned Task Force Status Report and Short-Term Recommendations."

3/4.7.13 AUXILIARY RIVER WATER SYSTEM

The operability of the ARWS ensures that sufficient cooling capacity is available to bring the reactor to a cold shutdown condition in the event that a barge explosion at the station's intake structure or any other extremely remote event would render all of the normal RIVER WATER SYSTEM supply pumps inoperable.

6.2.2 UNIT STAFF

The unit organization shall be subject to the following:

a. Each on duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.2-1.

b. At least one licensed Operator shall be in the control room when fuel is in the reactor.

c. At least two licensed Operators shall be in the control room during reactor startup, scheduled reactor shutdown and during recovery from reactor trips.

d. An individual qualified in radiation protection procedures shall be onsite when fuel is in the reactor.

e. ALL CORE ALTERATIONS after the initial fuel loading shall be directly supervised by either a licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation.

f. Administrative procedures shall be developed and implemented to limit the working hours of unit staff who perform safety-related functions; senior reactor operators, reactor operators, radiation control technicians, auxiliary operators, meter and control repairman, and all personnel actually performing work on safety related equipment.

The objective shall be to have operating personnel work a normal 8-hour day, 40-hour week while the plant is operating. However, in the event that unforseen problems require substantial amounts of overtime to be used, or during extended periods of shutdown for refueling, major maintenance or major plant modifications, on a temporary basis, the following guidelines shall be followed:

a. An individual should not be permitted to work more than 16 hours straight, excluding shift turnover time.

b. An individual should not be permitted to work more than 16 hours in any 24-hour period, nor more than 24 hours in any 48-hour period, nor more than 72 hours in any seven day period, all excluding shift turnover time.

6.3 FACILITY STAFF QUALIFICATIONS

6.3.1 Each member of the facility and Radiation Protection staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions, except for the Radiological Control Manager who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975, and the technical advisory engineering representative who shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in plant design and response analysis of the plant for transients and accidents.

6.4 TRAINING

6.4.1 A retraining and replacement training program for the facility staff shall be maintained under the direction of the Nuclear Training Manager and shall meet or exceed the requirements and recommendations of Section 5.5 of ANSI N18.1-1971 and Appendix "A" of 10 CFR Part 55.

6.5 REVIEW AND AUDIT

6.5.1 ONSITE SAFETY COMMITTEE (OSC)

FUNCTION

6.5.1.1 The OSC shall function to advise the Plant Manager on all matters related to nuclear safety and shall provide review capability in the areas of:

a. nuclear power plant operations
b. radiological safety
c. maintenance
d. nuclear engineering
e. nuclear power plant testing
f. technical advisory engineering
g. chemistry
h. quality control
i. instrumentation and control

COMPOSITION

6.5.1.2 The Plant Safety Review Director is the OSC Chairman and shall appoint all members of the OSC. The membership shall consist of a minimum of one individual from each of the areas designated in 6.5.1.1.

OSC members and alternates shall meet or exceed the minimum qualifications of ANSI N18.1-1971 Section 4.4 for comparable positions. The nuclear power plant operations individual shall meet the qualifications of Section 4.2.2 and the maintenance individual shall meet the qualifications of Section 4.2.3.

a. ECCS Actuation, Specifications 3.5.2 and 3.5.3.

b. Inoperable Seismic Monitoring Instrumentation, Specification 3.3.3.3.

c. Inoperable Meteorological Monitoring Instrumentation, Specification 3.3.3.4.

d. Seismic event analysis, Specification 4.3.3.3.2

e. Sealed source leakage in excess of limits, Specification 4.7.9.1.3.

f. Miscellaneous reporting requirements specified in the Action Statements for Radiological Effluent Technical Specifications.

g. Containment Inspection Report, Specification 4.6.1.6.2.

h. Steam Generator Tube Inservice Inspection Results Report, Specification 4.4.5.5.

6.1 RECORD RETENTION

6.10.1 The following records shall be retained for at least five (5) years:

a. Records and logs of facility operation covering time interval at each power level.

b. Records and logs of principal maintenance activities, inspections, repair and replacement of principal items of equipment related to nuclear safety.

c. All Reportable Events.

d. Records of surveillance activities, inspections and calibrations required by these Technical Specifications.

e. Records of reactor tests and experiments.

f. Records of changes made to Operating Procedures.

g. Records of radioactive shipments.

h. Records of sealed source leak tests and results.

i. Records of annual physical inventory of all sealed source material of record.

Revised License Condition 2.C(5)

(5) Fire Protection

The Licensee shall implement and maintain all provisions of the approved fire protection program as described in the UFSAR for the facility and subject to the following provision: The Licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

ATTACHMENT B

Proposed Technical Specification Change No. 138 Revision 1
Safety Analysis

Description of amendment request: The proposed revision provides a complete update of our previous submittal to remove all fire protection related requirements from the technical specifications. These changes reflect the guidance provided by the NRC in accordance with Generic Letter 88-12 and incorporate changes to the Administrative Controls provided by Amendment No. 131. The following changes are proposed:

1. Section 3.3.3.6 (Fire Detection Instrumentation) and corresponding Bases Section 3/4.3.3.6 have been deleted, and the requirements contained therein have been transferred to the UFSAR and plant operational procedures. A note (next page is 3/4 3-49) has been added to page 3/4 3-46 to reflect the above change. Section 6.9.2 item f has been deleted to reflect the above change. Table 3.3-10, Fire Detection Instruments, has been transferred to administrative procedures. Item 18 of Technical Specification Table 3.3-10 will be replaced by the Primary Auxiliary Building (PAB) smoke detection instruments which are included in Site Administrative Procedure (SAP) 9D "Fire Protection." Item 18 of Technical Specification Table 3.3-10, which provides the fire detection instruments for the Unit 2 control room zones 7, 8 and 9, has been included in the applicable Unit 2 section of SAP-9D. The Chemical Addition Building smoke detectors will be included as Item 25 in SAP-9D. These instruments have been added to ensure fire detection capability is available for safety related equipment located in the PAB and Chemical Addition Building.

2. The following plant system specifications have been deleted:

   a) 3.7.14.1 Fire Suppression Water System,

   b) 3.7.14.2 Spray and/or Sprinkler Systems,

   c) 3.7.14.3 CO_2 Systems,

   d) 3.7.14.4 Fire Hose Stations,

   e) 3.7.14.5 Halon Systems,

   f) 3.7.15 Fire Barrier Penetrations,

   g) Bases 3/4.7.14 Fire Suppression Systems,

   h) Bases 3/4.7.15 Fire Rated Assemblies, and

   i) 6.9.2 item g.

The requirements of these specifications have been incorporated into the UFSAR and plant procedures. Based on the guidance provided in Generic Letter 88-12, the requirement of specification 3.7.14.1 Action b for applicability to the provisions of specification 3.0.3 will be incorporated into the Fire Protection Program administrative procedures (SAP 9D). The Fire Protection Program and revisions will continue to be reviewed by the Onsite Safety Committee (OSC) in accordance with specification 6.5.1.6 item a.

3. Section 6.2.2 item f Fire Brigade requirements and 6.4.2 Emergency Squad training have been deleted. The requirements of these specifications have been transferred to the plant operational procedures.

4. Specification 6.5.1.2 has been revised to correct an editorial error, the title "Composition" has been added.

5. License condition 2.C.(5) has been replaced by the standard condition provided in section F of Generic Letter 86-10, Implementation of Fire Protection Requirements. The previous license condition 2.C.(5) referred to modifications identified in Table 1 of the Fire Protection Safety Evaluation Report for BVPS, Unit 1, dated May 9, 1979. These modifications have all been completed, therefore, this condition is no longer necessary.

The proposed changes do not involve any physical changes to plant safety related systems, components or structures and will not change the function or operation of the Fire Protection Systems. These changes move the requirements from the technical specifications to the UFSAR and SAP-9D which are identified as the Fire Protection Program. Review of the Fire Protection Program and revisions to it will continue to be performed by the Onsite Safety Committee in accordance with specification 6.5.1.6 item a to ensure the required systems are maintained ready for use during the required modes of plant operation. Fire Protection Program commitments and amendments will be transferred from the jurisdiction of 10 CFR 50.90 (Technical Specifications) to 10 CFR 50.71(e) and 10 CFR 50.59 (UFSAR) and the reporting requirements will be addressed in accordance with 10 CFR 50.72 and 10 CFR 50.73. The proposed changes do not involve any significant changes in requirements and are consistent with the NRC recommendations provided by the NRC in Generic Letters 86-10 and 88-12. Therefore, based on the above, these changes have been determined to be safe and will not reduce the margin of safety of the plant.

ATTACHMENT C

Proposed Technical Specification Change No. 138 Revision 1
No Significant Hazard Evaluation

Basis for proposed no significant hazards consideration determination: The Commission has provided standards for determining whether a significant hazards consideration exists in accordance with 10 CFR 50.92(c). A proposed amendment to an operating license for a facility involves no significant hazards consideration if operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; (2) create the passibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

The proposed changes do not involve a significant hazards consideration because:

1. Section 3.3.3.6 (Fire Detection Instrumentation) and corresponding Bases Section 3/4.3.3.6 have been deleted, and the requirements contained therein have been transferred to the UFSAR and plant operational procedures. A note (next page is 3/4 3-49) has been added to page 3/4 3-46 to reflect the above change. Section 6.9.2 item f has been deleted to reflect the above change. Table 3.3-10, Fire Detection Instruments, has been transferred to Site Administrative Procedure (SAP) 9D. Item 18 of Technical Specification Table 3.3-10 will be replaced by the Primary Auxiliary Building (PAB) smoke detection instruments which are included in SAP-9D. Item 18 of Technical Specification Table 3.3-10, which provides the fire detection instruments for the Unit 2 control room zones 7, 8 and 9, has been included in the applicable Unit 2 section of SAP-9D. The Chemical Addition Building smoke detectors will be included as Item 25 in SAP-9D. These instruments have been added to ensure fire detection capability is available for safety related equipment located in the PAB and Chemical Addition Building.

   a) This change does not involve a significant increase in the probability or consequences of an accident previously evaluated. No changes to the requirements have been made. This change simply removes the fire detection instrumentation requirements from the Technical Specifications and places them into the site fire protection program and procedures and the UFSAR without altering them. Review of the Fire Protection program and its revisions will continue to be the responsibility of the Onsite Safety Committee (OSC) in accordance with specification 6.5.1.6 item a.

b) This change does not create the possibility of a new or different kind of accident from any previously evaluated. The proposed change does not alter the requirements; it just moves them from the Technical Specifications to the UFSAR. Plant procedures will continue to provide the specific instructions for implementing the LCO, action, and surveillance requirements. There has been no reduction in commitments and, as incorporated into the plant procedures, this change meets the requirements of the existing Technical Specifications.

c) This change does not involve a significant reduction in the margin of safety No change is being proposed to the requirements themselves. Section 3.3.3.6 is being deleted, and the requirements contained therein are being incorporated into the UFSAR. Plant procedures will continue to provide the specific instructions necessary for the implementation of the requirements, just as they had when the requirements resided in the Technical Specifications. Fire Protection Program commitments and amendments will by this process be transferred from the jurisdiction of 10 CFR 50.90 to 10 CFR 50.71(e) and 10 CFR 50.59. The reportability criteria of 10 CFR 50.72 and 10 CFR 50.73 are still applicable.

2. Section 3.7.14.1 (Fire Suppression Water System) is deleted. All of the requirements contained therein, with the exception of the requirement of specification 3.7.14.1 Action b for applicability to the provisions of specification 3.0.3, which will be incorporated into the administrative procedures (SAP 9D) at the time of approval and issuance of this T.S. amendment, have been transferred to the UFSAR and SAP-9D. Section 6.9.2 item g has been deleted to reflect the above change.

a) This change does not involve a significant increase in the probability or consequences of an accident previously evaluated. This change removes the fire suppression water system requirements from the Technical Specifications and will place them into SAP-9D and the UFSAR without altering them. Review of the Fire Protection Program and its revisions will be the responsibility of the OSC, just as it has always been the responsibility of the OSC to review changes to fire protection requirements when they were part of the Technical Specifications.

b) This change does not create the possibility of a new or different kind of accident from any previously evaluated. The proposed change does not alter the requirements; it just moves them from the Technical Specifications to the UFSAR. Plant procedures will continue to provide the specific instructions for implementing the LCO, action, and surveillance requirements. There has been no reduction in commitments and, as incorporated into the plant procedures, this change will meet the requirements of the existing Technical Specifications.

c) This change does not involve a significant reduction in the margin of safety. Plant procedures will continue to provide the specific instructions necessary for the implementation of the requirements from specification 3.7.14.1. Fire Protection Program commitments and amendments will by this process be transferred from the jurisdiction of 10 CFR 50.90 to 10 CFR 50.71(e) and 10 CFR 50.59. The reportability criteria of 10 CFR 50.72 and 10 CFR 50.73 are still applicable.

3. Section 3.7.14.2 (Spray and/or Sprinkler Systems), 3.7.14.3 (CO_2 Systems), 3.7.14.4 (Fire Hose Stations), 3.7.14.5 (Halon Systems), and 3.7.15 (Fire Barrier Penetrations) are deleted, and the requirements contained therein have been transferred to SAP-9D. Section 6.9.2 item g has been deleted to reflect the above changes.

a) This change does not involve a significant increase in the probability or consequences of an accident previously evaluated. No changes to the requirements have been made. This change simply removes the spray and/or sprinkler system, halon systems, CO_2 system, fire hose station, and fire barrier penetration requirements from the Technical Specifications and places them into SAP-9D and the UFSAR without altering them. Review of the Fire Protection program and its revisions will be the responsibility of the Onsite Safety Committee (OSC) just as it has always been the responsibility of the OSC to review changes to fire protection requirements when they were part of the Technical Specifications.

b) This change does not create the possibility of a new or different kind of accident from any previously evaluated. The proposed change does not alter the requirements; it just moves them from the Technical Specifications to the UFSAR. Plant procedures will continue to provide the specific instructions for implementing the LCO, action, and surveillance requirements. There has been no reduction in commitments and, as incorporated into the plant procedures, this change meets the requirements of the existing Technical Specifications.

c) This change does not involve a significant reduction in the margin of safety. No change is being proposed for the requirements themselves. Sections 3.7.14.2, 3.7.14.3, 3.7.14.4, 3.7.14.5 and 3.7.15 are being deleted, and the requirements contained therein are being incorporated into the UFSAR. Plant procedures will continue to provide the specific instructions necessary for the implementation of the requirements, just as they had when the requirements resided in the Technical Specifications. Fire Protection Program commitments and amendments will by this process be transferred from the jurisdiction of 10 CFR 50.90 to 10 CFR 50.71(e) and 10 CFR 50.59. The reportability criteria of 10 CFR 50.72 and 10 CFR 50.73 are still applicable.

4. Section 6.2.2.f Site Fire Brigade Requirements and Section 6.4.2 have been deleted, and the requirements contained therein have been transferred to the plant operational procedures. Review of the Fire Protection Program and implementing procedures and revisions thereto will continue to be the responsibility of the Onsite Safety Committee (OSC) in accordance with specification 6.5.1.6 item a.

a) This change does not involve a significant increase in the probability or consequences of an accident previously evaluated. No changes to the requirements have been made. This change simply removes the site fire brigade requirements from the Technical Specifications and places them into SAP-9D and the UFSAR without altering them. Review of the Fire Protection program and its revisions will be the responsibility of the Onsite Safety Committee (OSC) just as it has always been the responsibility of the OSC to review changes to fire protection requirements when they were part of the Technical Specifications.

b) This change does not create the possibility of a new or different kind of accident from any previously evaluated. The proposed change does not alter the requirements; it just moves them from the Technical Specifications to the UFSAR. Plant procedures will continue to provide the specific instructions for implementing the LCO, action, and surveillance requirements. There has been no reduction in commitments and, as incorporated into the plant procedures, this change meets the requirements of the existing Technical Specifications.

c) This change does not involve a significant reduction in the margin of safety. No change is being proposed for the requirements themselves. Section 6.2.2.f and Section 6.4.2 are being deleted, and the requirements contained therein are being incorporated into the UFSAR. Plant procedures will continue to provide the specific instructions necessary for the implementation of the requirements, just as they had when the requirements resided in the Technical Specifications. Fire Protection Program commitments and amendments will by this process be transferred from the jurisdiction of 10 CFR 50.90 to 10 CFR 50.71(e) and 10 CFR 50.59. The reportability criteria of 10 CFR 50.72 and 10 CFR 50.73 are still applicable.

5. License condition 2.C.(5) has been replaced by the standard condition provided in section F of Generic Letter 86-10, Implementation of Fire Protection Requirements. The previous license condition 2.C.(5) referred to modifications identified in Table 1 of the Fire Protection Safety Evaluation Report for BVPS, Unit 1, dated May 9, 1979. These modifications have all been completed, therefore, this condition is no longer necessary.

a) This change does not involve a significant increase in the probability or consequences of an accident previously evaluated. The change in license conditions from those previously incorporated into the license to the one presented in Generic Letter 86-10 does not result in any loss of control of the change process.

Previously, changes to the Fire Protection Program that decreased the level of fire protection in the plant could only be made with prior Commission approval utilizing the license amendment process (10 CFR 50.90). Since the Fire Protection program and the former Technical Specifications are now incorporated into the UFSAR, their changes fall under 10 CFR 50.59 which contains the same record keeping requirement.

b) This change does not create the possibility of a new or different kind of accident from any previously evaluated. The proposed license conditions do not involve any significant change in requirements and are recommended by the NRC in Generic Letter 86-10.

c) This change does not involve a significant reduction in the margin of safety. The proposed license condition does not involve any significant change in requirements and was recommended by the NRC in Generic Letter 86-10.

Fire Protection program commitments and amendments will by this process be transferred from the jurisdiction of 10 CFR 50.90 to 10 CFR 50.71(e) and 10 CFR 50.59. The reportability criteria of 10 CFR 50.72 and 10 CFR 50.73 are still applicable.

The proposed changes do not involve any physical change to plant safety related systems, components or structures, will not increase the likelihood of a malfunction of safety related equipment, increase the consequences of an accident previously analyzed, nor create the possibility of a malfunction different than previously evaluated. The function and operation of the Fire Protection Systems remains unchanged. Therefore, based on the above, the changes have been determined to be safe and do not involve a significant hazards consideration.

ATTACHMENT D

Updated Final Safety Analysis Report

Section 9.10 "Fire Protection"

(Changes noted by revision bar at margin)

9.10 FIRE PROTECTION SYSTEM

Based on guidance provided in Generic Letter 86-10[6], the Facility Operating License was amended such that the fire protection requirements previously included in the Technical Specifications were relocated to this section of the UFSAR and Site Administrative Procedure (SAP) 9D Fire Protection, including the following license condition:

The licensee shall implement and maintain all provisions of the approved fire protection program as described in the UFSAR for the facility and subject to the following provision; the licensee may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

9.10.1 Design Bases

The fire protection system for Beaver Valley Power Station - Unit 1 (BVPS-1) has been designed such that any single fire will not cause an unacceptable risk to public health and safety, will not prevent the performance of necessary safe shutdown functions, and will not significantly increase the risk of radioactive release to the environment.

A fire occurring at both Units simultaneously is beyond the design basis for the site.[9] The likelihood of a fire spreading from one Unit to the other is considered unlikely due to the following:

- plant design features and existing fire barriers relative to fire loadings in each fire area,
- physical separation between BVPS-1 and BVPS-2 plant structures with the exception of shared facilities (i.e., intake structure and control room) as defined in Section 1.7 which have been analyzed per GDC 5, and
- defense-in-depth criterion utilized at both BVPS-1 and BVPS-2 relative to fire prevention, detection, and suppression capabilities.

The station is designed on the basis of minimizing the use of combustible materials and of the use of fire-resistant materials to the greatest extent possible.

A Fire Brigade of at least 5 members shall be maintained on site at all times. The Fire Brigade shall not include 3 members of the minimum shift crew necessary for safe shutdown of the unit or any personnel required for other essential functions during a fire emergency.

The system is designed in accordance with the standards of the National Fire Protection Association and is generally based on the recommendations of the insurance underwriter (American Nuclear Insurers). The fire protection system is designed on the basis that rupture or inadvertent operation will not significantly impair the safety capability of structures, systems, or components important to safety or designed to seismic Class I requirements.

10 CFR 50 Part 50.48 - Fire Protection[3], requires that each operating nuclear power plant have a fire protection plan that satisfies GDC 3 of Appendix A. The plan, described in SAP 9D Fire Protection, identifies the overall fire protection program, the organization and responsibilities for the program, and outlines the plan for fire protection for the site. The plan also describes specific features necessary to implement the program and the means to limit fire damage to structures, systems and components important to safety so that the capability to safely shutdown the plant is ensured.

Certain fire protection features that have been accepted by the NRC to satisfy the provisions of Appendix A to Branch Technical Position BTP APCSB 9.5-1 Guidelines for Fire Protection for Nuclear Power Plants Docketed Prior to July 1, 1976 are reflected in the Fire Protection Safety Evaluation Report which was issued by the NRC for BVPS-1 and documented as Amendment No. 18 to the Technical Specifications, dated June 6, 1979.[1,4]

Clarification and guidance with respect to permissible alternatives to satisfy Appendix A to BTP APCSB 9.5-1 is provided in the NRC document Nuclear Plant Fire Protection Functional Responsibilities, Administrative Control and Quality Assurance[2]. BVPS-1 complies with this document which meets the fire protection QA program criteria of Appendix A to BTP 9.5-1.

The Operations QA Program for Fire Protection for BVPS-1 is identified in the DLC Quality Assurance Program Appendix C - Fire Protection.

Appendix R to 10 CFR Part 50[5] establishes fire protection features required to satisfy GDC 3 with respect to certain generic issues for BVPS-1 (licensed to operate prior to January 1, 1979), applicable only as per the following:

-Section III.G: Safe Shutdown Capability
-Section III.J: Emergency Lighting
-Section III.O: RCP Oil Collection System

The NRC Safety Evaluation Report for Appendix R to 10 CFR 50 was issued on January 5, 1983, for BVPS-1. Exemptions for specific fire areas of the plant were granted per NRC letters dated March 14, 1983, August 30, 1984 and December 4, 1986.

9.10.2 Description

The fire protection systems are shown schematically in Figures 9.10-1 and 9.10-2. Design data for major components of the fire protection system are given in Table 9.10-1.

diesel generator cubicles following a CIB signal and undervoltage condition on the emergency busses. Release of CO_2 during operation of the diesel generator could result in stalling the diesel generator engine by the displacement of combustion air with CO_2. When CO_2 is discharged in an emergency diesel generator cubicle, safe plant shutdown is assured under the single failure criteria by the separation of both diesel generators by a fire wall.

Other electrical areas protected by CO_2, but which are not adversely affected by the release of CO_2, are the cable vaults and cable tray mezzanine.

Design features incorporated in the plant include the use of noncombustible materials as much as possible to minimize the potential for fire occurrences. Fire rated walls and doors and other fire barriers are also provided to prevent the spread of fire.

Fire protection equipment is of a type identified in the list of approved equipment issued by the Underwriter's Laboratories and conforms to the requirements of the insurance carrier (ANI) and the Standards for Sprinkler Systems NFPA No. 13, CO_2 NFPA No. 12 and Water Spray Systems NFPA No. 15. Compliance with the requirements of the above insurance interests and standards ensures the reliability of the fire protection equipment based on years of previous use and proven performance.

9.10.4 Tests and Inspections

Testing and inspection of the fire protection system is conducted in accordance with Site Administrative Procedure 9D.

Water Systems

Testing of the water system includes:

1. The diesel engine and electric motor driven fire pumps are subjected to a regular weekly operational test. The electric motor and diesel engine driven fire pumps are flow tested yearly to ensure proper functioning when required.

2. Tests on water spray systems serving outdoor facilities include the discharge of water and the observance of spray patterns.

3. Yearly waterflow tests are made to verify that the normal water supply is available and to indicate the possible presence of closed valves.

4. A semi-annual inspection (Spring and Fall) will be conducted of exterior hydrants to ensure that hydrant barrels are dry and the threads are lubricated. An annual operational hydrostatic test of hydrants will be performed to verify barrel integrity following the winter freeze(5,6).

9.10.5 Fire Protection Bases

9.10.5.1 Fire Detection Instrumentation

Operability of the fire detection instrumentation ensures that adequate warning capability is available for the prompt detection of fires. This capability is required in order to detect and locate fires in their early stages. Prompt detection of fires will reduce the potential for damage to safety-related equipment and is an integral element in the overall facility fire protection program.

In the event that a portion of the fire detection instrumentation is inoperable, the establishment of frequent fire patrols or in containment air temperature monitoring in the affected areas is required to provide detection capability until the inoperable instrumentation is restored to operability.

9.10.5.2 Fire Suppression Systems

The operability of the fire suppression systems ensures that adequate fire suppression capability is available to confine and extinguish fires occurring in any portion of the facility where safety-related equipment is located. The fire suppression system consists of the water system, spray and/or sprinklers, CO_2, Halon and fire hose stations. The collective capability of the fire suppression systems is adequate to minimize potential damage to safety-related equipment and is a major element in the facility fire protection program.

In the event that portions of the fire suppression systems are inoperable, alternate backup firefighting equipment is required to be made available in the affected areas until the inoperable equipment is restored to service. When the inoperable firefighting equipment is intended for use as a backup means of fire suppression, a longer period of time is allowed to provide an alternate means of fire fighting than if the inoperable equipment is the primary means of fire suppression.

The test requirements identified in Site Administrative Procedure 9D provide assurance that the minimum operability requirements of the fire suppression systems are met. An allowance is made for ensuring a sufficient volume of Halon in the Halon storage tanks by verifying either the weight or the level of the tanks. The halon systems are indoor, underfloor cable area systems not susceptible to outdoor weather conditions. The systems are dry pipe (rust is not expected) gas suppression systems.

In the event the fire suppression water system becomes inoperable, corrective measures must be taken as defined in the administrative procedures since this system provides the major fire suppression capability of the plant.

9.10.5.3 Fire Rated Assemblies

The operability of the fire barriers and barrier penetrations ensure that fire damage will be limited. These design features minimize the possibility of a single fire involving more than one fire area prior to detection and extinguishment. The fire barriers, fire barrier penetrations for conduits, cable trays and piping, fire windows, fire dampers, and fire doors are periodically inspected to verify their operability.

References for Section 9.10

1. Appendix A to Branch Technical Position APCSB 9.5-1, Guidelines for Fire Protection for Nuclear Power Plants Docketed Prior to July 1, 1976.

2. Nuclear Plant Fire Protection Functional Responsibilities, Administrative Controls, and Quality Assurance, NRC letter dated August 29, 1977.

3. 10 CFR 50.48 - Fire Protection for Operating Nuclear Power Plants.

4. Amendment No. 18 to the Beaver Valley Power Station Unit No. 1, Operating License DPR-66.

5. Appendix R to 10 CFR 50.

6. NRC Generic Letter 86-10.

7. Updated Fire Protection Appendix R Review Report for BVPS Unit 1.

8 Letter from S. A. Varga, Chief Operating Reactors Branch #1, Division of Licensing, NRC to J. J. Carey Vice President, Nuclear Group, DLC, dated May 14, 1985. Subject: "Clarification of Amendment 18, Fire Hydrant Barrel Inspection Frequency".

9. NUREG-1057 Safety Evaluation Report Related to the Operation of Beaver Valley Power Station, Unit 2.

ATTACHMENT E

Site Administrative Procedure 9-D

"Fire Protection Program"

DUQUESNE LIGHT COMPANY
Nuclear Group

Site Administrative Procedures

Chapter 9D

FIRE PROTECTION

Chapter Index

DUQUESNE LIGHT COMPANY
Nuclear Group

Site Administrative Procedures

Chapter 9D

FIRE PROTECTION

Chapter Index

DUQUESNE LIGHT COMPANY
Nuclear Group

Site Administrative Procedures

Chapter 9D

FIRE PROTECTION

I. PURPOSE

To define the administrative authorities, responsibilities and requirements of the Site Fire Protection Program.

II. APPLICABILITY

Applies to all Nuclear Group personnel. The basic fire protection administrative organization chart is shown on Figure 1.

III. DEFINITIONS

NOTE: Certain words (such as OPERABLE, CHANNEL FUNCTIONAL TEST, COLD SHUTDOWN, etc.) within this procedure are applicable to the definitions identified in the Technical Specifications, Section 1.0.

A. A Fire Area is the portion of a building or plant that is separated from other areas by boundary fire barriers (walls, floors, and ceilings including seals, fire dampers and doors).

B. Fire Barriers are those components of construction (walls, floors, ceilings) that are rated in hours of fire resistance to prevent the spread of fire.

C. Sub-areas or Zones are subdivisions of fire areas in which fire suppression systems are designed to combat particular types of fires.

D. A Fire Watch or Fire Barrier Attendant is an individual assigned to attend open fire barriers (fire door, penetration, etc.), to monitor areas during periods when existing fire protection systems are inoperable, or to monitor work processes and equipment or room conditions for possible fire hazards. The individual shall be trained in fire reporting procedures and portable fire extinguishing equipment.

E. Ignition Source is any form of welding, soldering, brazing, grinding or open flame work.

F. Combustible Material is any material that will burn or sustain the combustion process whether or not it exhibits flame under exposed fire conditions.

G. Fire Retardant Wood is treated wood which exhibits fire retardant properties or wood coated with a U.L. listed fire retardant compound having a flame spread rating of 25 or less.

H. Flammable Liquid is any liquid having a flash point below 100°F, except any mixture having components with flash points of 100°F or higher, the total of which make up 99% or more of the total volume of the mixture (i.e., solvents, etc.).

I. Combustible Liquid is any liquid having a flash point of 100°F or higher (i.e, lube oil, etc.).

J. Flash Point is the minimum temperature at which a liquid gives off vapor within a test vessel in sufficient concentration to form an ignitable mixture with air near the surface of the liquid.

K. Incipient-type Fire is a fire in its initial or beginning stage that can be controlled or extinguished by portable extinguishing equipment.

IV. ORGANIZATION AND RESPONSIBILITIES

An Administrative Organization Chart, Figure 1 depicts the organization relative to the implementation of the fire protection program.

A. Supervisory personnel shall have the authority and responsibility for activities which are conducted by individuals under their general supervision with respect to the fire protection program.

B. Department Managers have responsibility for the activities conducted under their control. They, in turn, are to hold accountable each supervisor, staff member and worker for the proper performance of activities associated with the fire protection program.

C. The Manager, Quality Assurance Unit is responsible for developing and implementing an inspection and audit program that verifies DLC compliance with the Fire Protection Program.

D. The Manager, Nuclear Engineering Department is responsible for ensuring that plant modifications comply with design criteria for fire protection, and has responsibility for evaluating update requests and maintenance of the BVPS Unit 1 Updated Fire Protection Appendix R Review Report (UFPARR) and the BVPS Unit 2 Fire Protection Safe Shutdown Report (FPSSR). He is responsible for assuring the periodic update of the Unit 1 and Unit 2 Reports and coordinating, tracking

and processing of proposed changes as per the instructions provided in Attachment A of this procedure.

E. Section reviewers identified in Tables 1A and 2A of Attachment A are responsible for review of proposed changes to the BVPS Unit 1 UFPARR and the BVPS Unit 2 FPSSR.

F. The Manager, Nuclear Safety has responsibility for the overall administration of the fire protection program.

G. The Manager, Nuclear Training is responsible for development, implementation and revision of the fire training program, as well as coordinating, scheduling and providing classroom training.

H. The Director of Licensing is responsible for directing the efforts associated with the implementation of the fire protection program.

I. The Senior Licensing Supervisor has responsibility for supervising the Fire Protection Engineers, the overall implementation and assessment of effectiveness of the fire protection program, and for ensuring the development of proper fire protection training program for Nuclear Group personnel. He is also responsible for updating this procedure and performing the two-year review per SAP 11.

J. Fire Protection Engineers:

1. Responsible for monitoring the day-to-day implementation of the fire protection and prevention program.

2. Periodically assess the effectiveness of BVPS site fire protection program including Fire Brigade and fire protection training, fire drills and fire prevention program reviews, as required.

3. Assist in the design and selection of fire protection equipment.

4. Ensure the required fire protection and prevention procedures are in place and conduct a periodic review of such procedures.

5. Responsible for assisting other departments in development and implementation of procedures in matters affecting fire protection and prevention.

6. Responsible for evaluating and analyzing fire hazards and activities concerning fire protection and prevention.

7. Provide the Nuclear Group staff with technical information and expertise, as required, in the area of fire protection and prevention.

8. Responsible for processing of open burning permit for purposes of fire school training on an annual basis from the State of Pennsylvania Bureau of Air Quality Control.

J. Site Fire Brigade (Emergency Squad)

The structure of the Site Fire Brigade is shown in Figure 2 - Site Fire Brigade (Emergency Squad) Organization Chart.

The function of the Fire Brigade (also referred to as the Emergency Squad) is to execute the necessary actions during an emergency to alleviate or minimize the consequences of the emergency.

A Fire Brigade of at least 5 members shall be maintained on site at all times. The Fire Brigade shall not include 3 members of the minimum shift crew necessary for safe shutdown of the unit or any personnel required for other essential functions during a fire emergency.[1]

Members of the Site Fire Brigade are assigned responsibility as follows:

1. Brigade Chief - Nuclear Station Operating Foreman (or, in his absence, as assigned by on-duty Shift Supervisor).

   a. Coordinates activities between Brigade & Control Room in the execution of emergency procedures.

   b. Determines what actions are necessary to control and extinguish the fire as well as evaluating radiological hazards.

   c. Ensures that the necessary fire suppression systems are activated and that the Fire Brigade members safely utilize the proper equipment.

   d. Augments the brigade with any available personnel or offsite organizations if the fire or first-aid emergency needs are such that the basic squad cannot adequately control the incident.

   e. Determines if an area should be evacuated of non-essential personnel and the escape route(s) that should be utilized.

2. Brigade Captain - Nuclear Control Operator (or, in his absence, as assigned by on-duty Shift Supervisor)

   a. Assumes duties of the Chief in his absence.

   b. Directs the fire-fighting operations of the brigade.

   c. Clears all energized equipment (without affecting safe shutdown capability) which may endanger safe execution of fire fighting activities of the Brigade personnel.

   d. Assures availability of necessary emergency equipment.

3. Additional Brigade members:

   a. The additional Brigade members carry out the orders of the Brigade Captain in controlling and extinguishing the fire and/or caring for the injured.

   b. Each member of the Fire Brigade shall be capable of acting:

      1) To alert the site Fire Brigade.

      2) To recognize the fire alarm and respond properly and in accordance with approved pre-fire plan procedures/strategies.

      3) To use available rescue and fire-fighting equipment.

      4) To safely evacuate non-essential personnel from the affected area, if necessary.

      5) To utilize the portable and fixed fire extinguishing suppression systems.

      6) To cooperate with offsite fire department personnel in a coordinated fire-fighting effort.

4. Fire Marshall(s) - A fire marshall may be any one of the following:

   - Any qualified brigade member

   - Any DLC supervisor, qualified as such through the fire training program

a. Shall be qualified to handle incipient-type fires in accordance with fire training program.

b. Shall aid in safely evacuating non-essential personnel from the area.

c. Shall assist the brigade so as to alleviate and minimize the consequences of the fire emergency.

5. Brigade Assistant(s); The Brigade Chief is authorized to commandeer any qualified DLC employee to assist the Brigade force when such assistance is required. It is the responsibility of those commandeered DLC employees to perform the assigned tasks to the best of their ability without disruption to the Brigade force.

V. REFERENCES

1. BVPS Unit 1 (2) FSAR, Section 9.10 (9.5.1 and Appendix 9.5A) - Fire Protection System (FPS).
2. BVPS Unit 1 (2) Technical Specifications.
3. BVPS Unit 1 (2) Operating Manual, Chapter 33 (2.33), FPS.
4. BVPS Unit 1 (2) Operating Manual, Chapter 55A.4 (2.55A.4) Operations Surveillance Tests, 1.33 (2.33) Series.
5. BVPS Unit 1 (2) Operating Manual, Chapter 56B (2.56B), Fire Prevention and Control.
6. BVPS Unit 1 (2) Operating Manual, Chapter 56C (2.56C) Alternate Safe Shutdown from Outside Control Room.
7. BVPS Units 1/2 Maintenance Manual, Section 13, General Work Practice Procedures.
8. Fire Protection Safety Evaluation Report dated May 3, 1979 issued by the NRC for BVPS 1 (Tech. Spec., Amendment 18).
9. Appendix A to Branch Technical Position APCSB 9.5-1, Guidelines for Fire Protection for Nuclear Power Plants Docketed Prior to July 1, 1976.
10. Nuclear Plant Fire Protection Functional Responsibilities, Administrative Controls, and Quality Assurance, NRC letter dated August 29, 1977.
11. 10 CFR 50.48 - Fire Prot. for Operating Nuclear Power Plant.
12. Appendix R to 10 CFR 50.
13. NRC Generic Letter 86-10.
14. Updated Fire Protection App. R Review Report for BVPS 1.
15. Fire Protection Safe Shutdown Report for BVPS Unit 2.
16. NRC Inspection Reports 87-11 and 87-17 for BVPS Unit 2.
17. Appendix C of DLC - Operations QA Program.
18. Safety Evaluation Report (SER) related to BVPS No. 2 (NUREG 1057), Section 9.5.1 Fire Protection Program.
19. Facility Operating License No. NPF-64, BVPS Unit 2.
20. QA Audit Response (BV-C-87-12), ND3VPN:5307 dated Jan. 29, 1988.

VI INSTRUCTIONS

A. Requirements

1. All activities and requirements associated with the fire protection program shall be conducted in accordance with this procedure and the applicable fire protection sections of the FSAR for Units 1 and 2.

2. 10 CFR Part 50, General Design Criterion 3 (GDC 3) of Appendix A specifies that structures, systems, and components important to safety shall be designed and located to minimize the probability and effect of fires and explosions.

3. 10 CFR 50.48 - "Fire Protection," requires each operating nuclear power plant have a fire protection plan that satisfies GDC 3 of Appendix A. The plan shall describe the overall fire protection program per the guidelines of Appendix A to BTP APCSB 9.5-1, "Guidelines for Fire Protection for Nuclear Power Plants Docketed Prior to July 1, 1976."

   a. A Fire Protection Safety Evaluation Report (dated May 3, 1979) was issued by the NRC for BVPS Unit 1 and documented as Amendment No. 18 to the Technical Specifications.

4. Clarification and guidance with respect to permissible alternatives to satisfy Appendix A to BTP APCSB 9.5-1 is provided in NRC document "Nuclear Plant Fire Protection Functional Responsibilities, Administrative Control and Quality Assurance." Compliance to this document is required to meet the fire protection QA program criteria of Appendix A to BTP 9.5-1 for BVPS Unit 1.

5. Appendix R to 10 CFR Part 50 establishes fire protection features required to satisfy GDC 3 for BVPS Unit 1 as follows:

   - Section III.G; Safe Shutdown Capability
   - Section III.J; Emergency Lighting
   - Section III.O; RCP Oil Collection System

   An Appendix R report ("Updated Fire Protection Appendix R Review") was prepared for BVPS Unit 1 which contains the fire hazards analysis and summarizes the investigative electrical analysis performed for BVPS Unit 1 to determine if fires within a single area could jeopardize the ability to safely shutdown the plant.

   NRC Safety Evaluation Report for Appendix R to 10 CFR 50 was issued on January 5, 1983, for BVPS Unit 1.

Exemptions for specific fire areas of the plant were granted per NRC letters dated March 14, 1983; August 30, 1984; December 4, 1986; and July 27, 1987.

6. Branch Technical Position (BTP) CMEB 9.5-1, which is part of the acceptance criteria of Standard Review Plan 9.5.1 (NUREG 0800), dated July 1981, also provides guidelines acceptable to the NRC for implementing GDC 3 in the development of a fire protection program. The BVPS Unit 2 Fire Protection System (FPS) was designed using the guidance of Branch Technical Position (BTP) CMEB 9.5-1. BVPS Unit 2 utilizes alternatives to the guidance provided in Branch Technical Position CMEB 9.5-1 with the associated justifications provided in Appendix 9.5A of the FSAR.

   a. A Fire Protection Safety Evaluation Report was issued for BVPS Unit 2 as part of NUREG 1057, "SER Related to the Operation of BVPS Unit 2."

7. The BVPS Unit 1 and BVPS Unit 2 operating license establishes the requirement for implementing and maintaining in effect all provisions of the fire protection program. Table 1 and 2 of this SAP provides the operability and surveillance requirements, respectively, for the fire protection systems for both Units 1 and 2.

8. The fire insurance requirements (Tables 3 and 4) for the fire protection systems were added to this SAP to provide a single source document where all fire protection requirements could be located. The fire insurance requirements are not to be construed as conditions for our operating license under NRC rules and regulations.

B. Operation

1. Fire detection and suppression systems shall be operated in accordance with established operating procedures and instructions.

2. Permanent and portable fire protection equipment shall be operated in accordance with Operating Manual Chapter 1.33 (2.33) - Fire Protection System, and Operating Manual Chapter 1.55A (2.55A) - Operations Surveillance Testing of Fire Protection Equipment.

3. Permanent and portable fire protection equipment should not be used for purposes other than fire protection.

C. Maintenance

1. Maintenance or repair of fire protection systems, equipment or elements shall be requested and performed in accordance with SAP 3D, "The Maintenance Work Request." The Fire Protection Engineer shall review maintenance work requests tracking reports for MWRs categorized as Category "F" or classified as Operating Manual System Chapter 33, "Fire Protection System".[19]

2. First-line supervisors shall ensure the requirements for transient combustibles, ignition sources, and fire barrier penetrations or barriers are met as described in Maintenance Manual, Section 13.

D. Inspection and Testing

1. Table 2, "Fire Protection System Surveillance Requirements" identifies the minimum requirements for periodic testing and inspection that is delineated in the FSAR for BVPS Units 1 and 2.

2. Open flame testing for leak testing purposes is prohibited.

3. Fire rated assemblies and penetration seals are inspected in accordance with approved station testing procedures.

4. Operations testing for fire protection related equipment (33 series) is performed in accordance with Operations Surveillance Tests (OSTs).

5. Maintenance testing for fire protection related equipment (33 series) is performed in accordance with Maintenance Surveillance Procedures (MSPs), Preventive Maintenance Procedures (PMPs), Corrective Maintenance Procedures (CMPs) and Instrument Calibration Procedures (ICPs).

6. Post-maintenance testing shall be performed in accordance with SAP 8A, "Maintenance," and SAP 3D, "The Maintenance Work Request."

7. Operations Quality Control (OQC) activities that govern surveillance and inspection of maintenance for fire protection related equipment (Category F) are identified in OQC Procedures.

E. Control of Ignition Sources

1. Any activity involving an ignition source (such as welding, cutting, grinding and open flame work)

potentially affecting safety related equipment shall be governed by a Hot Work Permit in accordance with the BVPS 1/2 Maintenance Manual, Section 13. The Area Work Permit (SAP 41) is an acceptable alternative to the use of a Hot Work Permit during maintenance outage periods and for work activities in non-safety related areas (yard areas, fab shops, etc.).

2. Smoking is prohibited except in designated areas of the plant. Smoking areas have been specifically designated and identified with signs posted in areas.

F. Control of Combustibles and Flammable Liquids

1. Control of transient combustibles and flammable liquids shall be in accordance with Operating Manual 1.56B.4 (2.56B.4), "Fire Prevention and Control," and Maintenance Manual, Section 13. Procedures have been developed to establish the following controls:

   a. All waste, debris, scrap, rags, oil spills, or other unneccessary combustibles resulting from work activity in safety-related areas are to be removed and/or cleaned up as soon as possible.

      1) For noncontinuous work activities, highly combustible materials will be cleaned up at the end of the shift or activity, whichever is sooner.

      2) Low hazard combustible material will be removed at the end of the work activity.

   b. Approved trash containers are provided in safety-related areas.

   c. Periodic inspections for accumulation of combustibles and transient fire loading during maintenance are conducted in safety-related areas in accordance with housekeeping procedures.

   d. Combustibles required for operation and maintenance in safety-related areas are stored in proper receptacles or approved storage cabinets. Stairwells are not used for storage of combustibles. Flammable liquids required for maintenance are issued only in fixed amounts and in approved containers.

   e. Charcoal and particulate filters not stored in approved fire-retardant containers will be removed from safety-related areas as soon as possible or

stored in areas serviced by a deluge spray or sprinkler system.

f. Transient combustible materials in safety-related areas will not be left unattended unless special provisions have been provided or the material is properly stored. The Fire Protection Engineer will be contacted, if necessary, to specify additional fire protection for potential transient fire hazards that cannot be avoided.

g. The primary fire protection concept for the Reactor Containment area is to minimize the use of combustible materials. During maintenance and outage periods, administrative controls will be adhered for controlling transient fire loads.

h. The combustible contents of the Condensate Polishing Building will be confined to the specific areas protected by automatic sprinkler systems. The ventilation system charcoal filter provided with a heat detector with control room alarm indication and manual deluge system capability is an exception.[1]

i. All lumber and wood required for use will be treated. Fire-retardant wood will be limited to temporary use. Large wooden timbers, or any special size or application-type lumber not available as treated wood, may be coated or wrapped with an Underwriters' Laboratory (UL) listed fire-retardant compound or material.

Exceptions are wood in the form of crates or shipping boxes (including any packing material) which will be removed as soon as possible after removal of equipment from boxes. In addition, wooden step ladders and relay test rigs required for certain job functions are acceptable provided they are stored properly after use.

G. Engineering Design and Procurement Document Control

1. Except for certain Fire Protection System (FPS) valves that interface with Category I Systems, fire protection equipment shall be designated as "Category F". The special category designation is to insure that the guidelines for design, procurement, installation, testing and inspection and administrative controls for the fire protection system are adequately reviewed and controlled. Operations Quality Control (OQC) activities associated with these requirements are described in applicable OQC procedures.

2. Fire Protection equipment shall conform to the type identified in the list of approved equipment issued by Underwriter's Laboratories, and/or conforms to the applicable NFPA Standards.

3. Preparation, review and approval of procurement and design documents shall be accomplished in accordance with written procedures. The Fire Protection Engineer shall be included in the review cycle and shall review and approve all purchase requisitions and design documents associated with fire protection equipment regardless of category.

4. Modifications to the Fire Protection System shall be designed utilizing the guidelines of NFPA Codes and with consideration of recommendations from the Fire Insurance carrier. The following documents shall be considered in the design of physical modifications to permanent fire protection equipment.

   - BVPS Unit 1 - Updated Final Safety Analysis Report (UFSAR) and the Updated Fire Protection Appendix R Review Report (UFPARRR).

   - BVPS Unit 2 - Final Safety Analysis Report (FSAR) and the Fire Protection Safe Shutdown Report (FPSSR).

5. Any changes involving fire protection equipment and/or systems shall be reviewed for compliance with applicable NFPA codes.

6. Prior to installation of new equipment or major modification to existing equipment, design drawings of FPS and equipment installations shall be submitted to the Fire Protection Engineer and the fire insurance carrier for review and approval.

7. The Fire Protection Engineer shall perform in-process inspections of FPS new installations or modifications to the FPS.

8. The BVPS Unit 1 UFPARRR and the BVPS Unit 2 FPSSR shall be periodically updated. Changes to the Reports shall be made per Instructions provided in Attachment A to this SAP.

H. Training

1. Instruction

a. Training will be accomplished in accordance with Training Manual, Section 9.3 "Fire Protection Training," which meets the requirements of OSHA Standard 29 CFR 1910.156(c), 10 CFR 50.48, NFPA 27-1976, and the guidelines established in BTP CMEB 9.5-1.

2. Training Program

a. The training program includes instructions to all station personnel regarding immediate actions to be taken upon discovery of a fire.

b. Fire Brigade members are given regular training and practice in fire fighting and rescue routines, including radiological control practices, evacuation procedures and escape routes, etc., to ensure that each member is thoroughly familiar with the steps to be taken in the event of a fire.

Classroom instructions, with training aids such as literature and other audio and/or visual aids, and practical, hands-on training are provided to familiarize the members of the Fire Brigade in fire fighting techniques and equipment.

c. Fire Watches and Fire Barrier Attendants are provided with initial hands-on training of fire extinguishers, trained in proper fire reporting procedures, and provided with an annual familiarization through the General Employee Refresher Training (GERT) program.

d. Fire Marshalls are given periodic training in fire-fighting and evacuation procedures and escape routes, as appropriate.

e. Training records shall be maintained for at least 3 years.

3. Fire Drills

a. Plant fire drills and critiques shall be periodically scheduled and conducted in accordance with the Fire Training Program.

b. Each Shift Fire Brigade Squad will conduct at least four (4) drills per year which will include the use of fire protection and/or first aid equipment.

Each Brigade Squad member will participate in at least (2) drills per year.[8]

c. Drills will periodically be held on back-shift, will normally be unannounced and will include a critique as well as assessment of equipment and Brigade effectiveness.

d. All fire brigade personnel will participate in a retraining program over a two (2) year period.

e. A site fire drill will be conducted with local fire department participation at least annually.

f. A cable spreading room drill will be conducted by each shift fire brigade squad at least once a year (applicable to Unit 2).[17]

I. Prefire Plans

1. Strategies for fighting fires in all safety-related areas and in areas presenting a hazard to safety-related equipment are defined in Operating Manual 1.56B.3 (2.56B.3), "Prefire Plan Strategies." These strategies are not procedures or instructions per se, but serve as resource information to be used for training purposes and by the fire brigade as an aid to fire fighting.

J. Quality Assurance

1. Fire Protection shall be conducted in accordance with Appendix C of the DLC - Operations Quality Assurance Program.

2. The Quality Assurance program ensures that the guidelines for design, procurement, installation, testing, inspection and administrative controls for the Fire Protection Program are adequately reviewed and controlled.

K. Physical Requirements

1. Qualifications of fire brigade members include physical examinations in accordance with guidelines of ANSI N-546 conducted every three years, and an annual review by the Duquesne Light Company Medical Department to screen personnel for medical problems.

L. Program Review

1. Audits shall be conducted utilizing the guidelines of Generic Letter 82-21 and performed under the cognizance of the Offsite Review Committee.[16]

   a. The fire protection program and implementing procedures shall be reviewed at least once per 24 months by the QA Unit.

   b. An independent fire protection and loss prevention program inspection and audit shall be performed at least once per 12 months utilizing either qualified offsite licensee personnel, an outside fire protection firm, QA or American Nuclear Insurers (ANI).

   c. An inspection and audit of the fire protection and loss prevention program shall be performed by a qualified outside fire consultant or ANI at least once per 36 months.

2. The fire insurance carrier periodically performs independent inspections and audits of the fire protection and prevention program. Resolution of items or recommendations from audits and inspections shall be handled in accordance with NGD 8, "Audits and Inspections".

M. Records

1. Records which document compliance with the fire protection program shall be retained in accordance with Site Administrative Procedure Chapter 7, "Office, Records Management and Security."

N. Out-of-Service Requirements/Reportability

1. Tag-out of the fire detection and fire suppression systems shall be in accordance with SAP 41, "Clearance Procedures." The on-duty Shift Supervisor for the respective unit shall ensure compliance with operability requirements for fire protection.

   a. The Fire Protection Impairment/System OOS Form (Figure 3) should be initiated by the work party and verified by Operations.

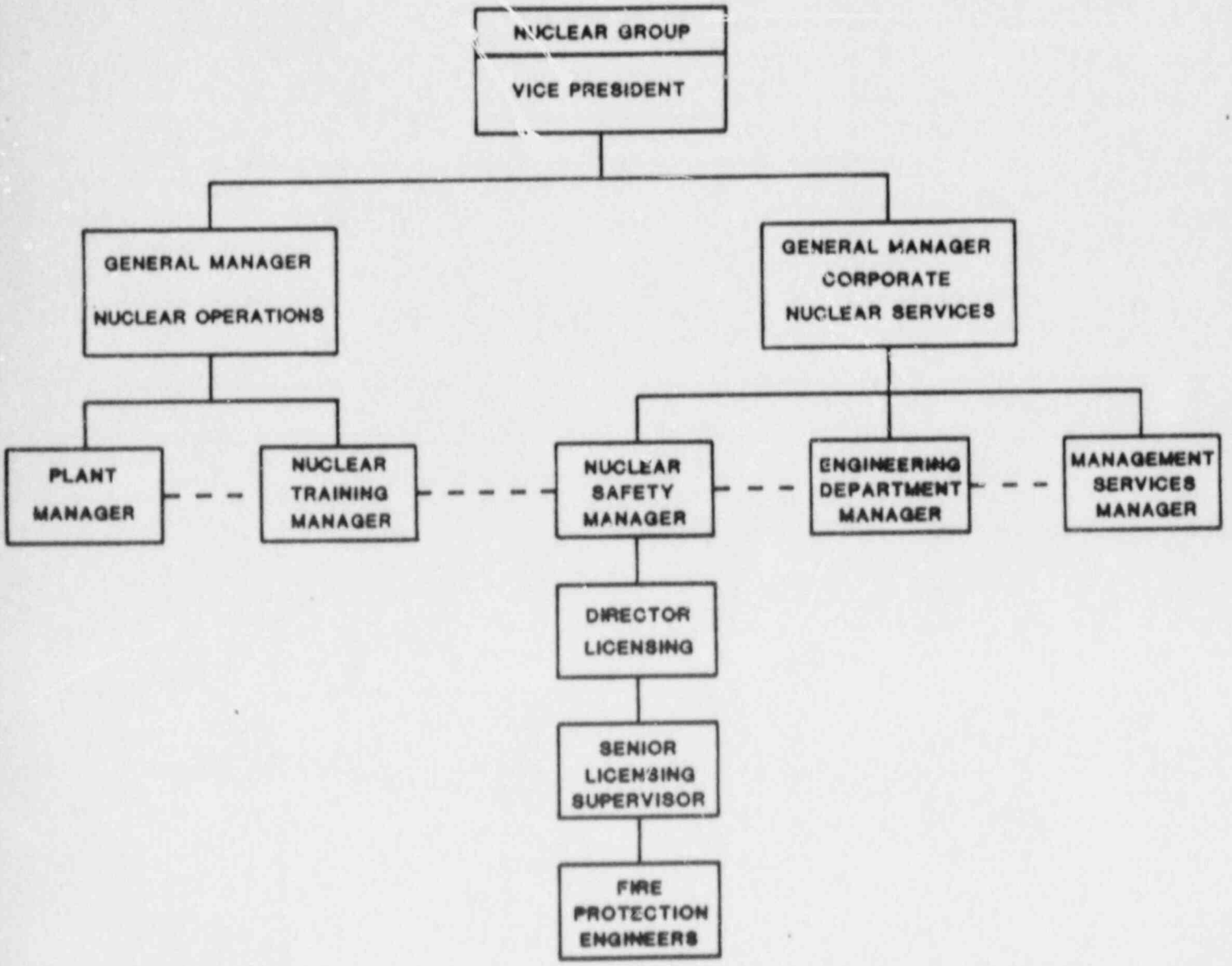
   b. Refer to Tables 1 and 3 of this SAP for required actions to be taken for fire protection equipment inoperability. If a fire watch is required, the Fire Watch Log (OM 54, Log L8-2) shall be utilized.

2. An inoperable or partially inoperable (i.e., degraded) fire protection system or component as defined in Table 1 and Table 3 of this SAP shall be evaluated and considered for reporting as an impairment per SAP 3B, "Reporting Requirements", and appropriate actions taken. Reportability criteria of 10 CFR 50.72 and 10 CFR 50.73 should be evaluated for applicability.

   a. Notifications of impairments shall be made per SAP 3B, as appropriate.

   b. For applicability to 10 CFR 50.73, consideration for a fire event should be postulated when evaluating the degraded or inoperable condition for its potential effect on safe shutdown capability (Reference: SAP 13, "Preparation of Draft Incident Reports, Unit Off Normal Reports and Conduct of Critiques".).

FIRE PROTECTION
ADMINISTRATIVE ORGANIZATIONAL CHART
NUCLEAR GROUP



LEGEND

_____ COMMAND

- - - COMMUNICATION

FIGURE 1

SITE FIRE BRIGADE (EMERGENCY SQUAD) ORGANIZATIONAL CHART

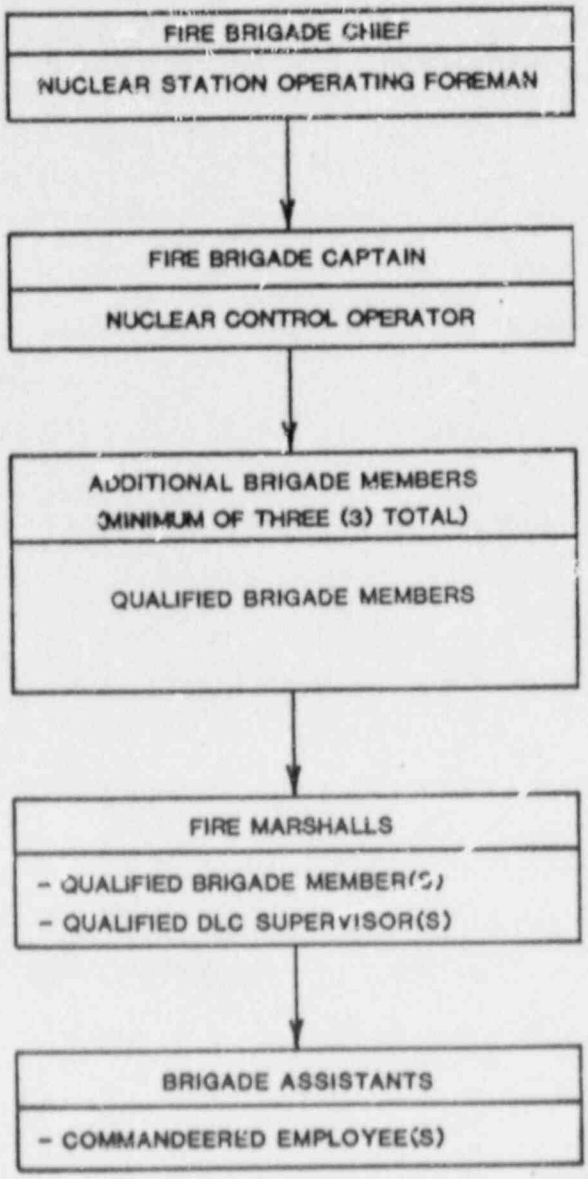


FIGURE 2

FIRE PROTECTION IMPAIRMENT/SYSTEM O.O.S. FORM

Date: _____ Time: _____ Check one: Unit 1 [ ]/Unit 2 [ ]

Clearance Permit No.: _____ (Attach to Clearance Permit, if applicable)

1. Affected System: CO_2 [ ], Halon [ ], Water [ ] (Check one)
2. Building/Area affected: _____
3. Date/Time - O.O.S. _____/_____/_____@_____
4. Expected Return to Service Date: _____
5. Reason for System O.O.S. (Failure, MWR, PMP, OST, BVT, etc.): _____
   _____
6. SAP 9D Table 1 or 3 Requirements: _____
   _____
7. Valve(s) Closed: _____ (I.D.)
8. Panel De-energized: _____ (I.D.)
9. Name of Work Group Supervisor: _____
10. Fire Watch Provided: YES [ ], NO [ ] (Check one)
11. If #10 was checked YES, type of fire watch?

    Continuous [ ], Hourly [ ] (Check one)

NOTE: UTILIZE FIRE WATCH LOG, OM 54, LOG L8-2.

12. Was F.P. Engineer notified? YES [ ], NO [ ] (Check one)
13. Was ANI notified? (Ref. SAP 3B) YES [ ], NO [ ] (Check one)

    By Whom: _____
14. Compensatory Measures taken? YES [ ], NO [ ] (Check one)
15. If #14 was checked YES, then identify the compensatory measures:
    _____
    _____
16. Signature of NSS authorizing the work: _____/_____
    NSS Date

FORWARD COMPLETED COPY TO F. P. ENGINEER. ATTACH ORIGINAL TO CLEARANCE PERMIT OR MWR.

FIGURE 3

TABLE 1 (Page 1 of 5)

OPERABILITY REQUIREMENTS FOR FIRE PROTECTION SYSTEM

NOTE: Prior to removal of any major portion of the FPS or upon discovery that a major piece of FPS equipment or section is out-of-service, the fire insurance carrier (ANI) shall be notified (Refer to SAP 3B).

CAUTION: EXCEEDING OPERABILITY REQUIREMENTS CONSTITUTES A REPORTABLE OCCURANCE (Refer to SAP 13 guidelines and SAP 3B, as applicable).

SYSTEM	REQUIREMENT	APPLICABLE MODES	CONDITION	REQUIRED ACTION	TIME REQUIREMENT
1. Fire Detection Instrumentation	Instrumentation for each fire zone protecting safety-related equipment shall be OPERABLE. Unit 1: Refer to Table 1.1 of this SAP Unit 2: Refer to Table 1.2 of this SAP	Whenever the equip. that is being protected is required to be OPERABLE.	a. With the number of OPERABLE fire detection instruments less than required by Table 1.1 (BVPS #1) or Table 1.2 (BVPS #2)	a.1. Outside cnmt. a) establish an hourly fire watch patrol in the affected area. a.2. Inside cnmt. a) inspect affected cnmt. zone every 8 hrs. OR b) monitor cnmt. air temp. every hr. b. Restore to OPERABLE status	a) Within 1 hr. a) Within 8 hrs. b) Within 1 hr. b. Within 14 days.
2. Fire Suppression Water System	a. Two OPERABLE fire suppresion pumps aligned to the fire suppression header.	At all times.	a.1. One pump inoperable. a.2. Two pumps inoperable.	a.1. Restore to OPERABLE status OR provide an alternate pump. a.2. Provide a backup fire suppression water system.	a.1. Within 7 days. a.2. Within 24 hrs.
	~~*~~b. Operable flow path (Applicable to Units 1 & 2).	At all times.	~~*~~b. Flow path inoperable.	~~*~~b. Provide a backup fire suppression water system.	~~*~~b. Within 24 hrs.

Note: With the Required Action not satisfied in the specified time Requirement for an inoperable flow path, apply the requirements of Technical Specification 3.0.3.

TABLE 1 (Page 2 of 5)

NOTE: Prior to removal of any major portion of the FPS or upon discovery that a major piece of FPS equipment or section is out-of-service, the fire insurance carrier (ANI) shall be notified (Refer to SAP 3B).

CAUTION: EXCEEDING OPERABILITY REQUIREMENTS CONSTITUTES A REPORTABLE OCCURANCE (Refer to SAP 13 guidelines and SAP 3B, as applicable).

SYSTEM	REQUIREMENT	APPLICABLE MODES	CONDITION	REQUIRED ACTION	TIME REQUIREMENT
2. (continued)	c. The BVPS #2 Booster Pump (capacity 625 gpm) capable fo taking suction from the Service Water Sys (SWS) & aligned to the Unit 2 hose rack stations for the safety related equipment areas.	At all times.	c. Booster Pump inoperable.	c. Restore to OPERABLE status OR provide an alternate water supply to the fire suppression water sys capable of supplying backup water to the applicable safety related equipment areas.	c. Within 7 days.
3. Spray and/or Sprinkler System	The following sprinkler systems serving areas shall be OPERABLE: Applicable to Units 1 and 2: - Cnmt. (RHR Area)* - Cnmt. (Cable Pen. Area)* - Aux. FW Pump Area** - CCR Pump Area - Main Filter Bank - Cnmt. Iodine Charcoal Filters (BV-2) - PAB 735, 752 and 768 levels (BV-1)	Whenever the equip. being protected is required to be OPERABLE.	a. One or more of the selected portions inoperable in areas containing redundant systems or components.	a. Establish an hourly fire watch patrol in the affected area with backup fire suppression capability. (See NOTES Below) b. Restore to OPERABLE status.	a. Within 1 hour. b. Within 14 days.

*NOTE: With Cnmt. area Sprinkler System inoperable, check this area during scheduled cnmt. entries in Modes 1-4 and once per shift in Modes 5 and 6.

**NOTE: Until such time as the backup Aux. FW Pump is operable (BV-1) establish a continuous fire watch whenever Unit 1's Aux. FW Pump Sprinkler System is inoperable.

TABLE 1 (Page 3 of 5)

NOTE: Prior to removal of any major portion of the FPS or upon discovery that a major piece of FPS equipment or section is out-of-service, the fire insurance carrier (ANI) shall be notified (Refer to SAP 3B).

CAUTION: EXCEEDING OPERABILITY REQUIREMENTS CONSTITUTES A REPORTABLE OCCURANCE (Refer to SAP 13 guidelines and SAP 3B, as applicable).

SYSTEM	REQUIREMENT	APPLICABLE MODES	CONDITION	REQUIRED ACTION	TIME REQUIREMENT
4. CO2 System	The following CO2 Systems shall be OPERABLE: Unit 1 Areas: - Cable Tray Mezzanine - Cable Vaults - Diesel Generator Rooms Unit 2 Areas: - Cable Spreading Area Cntrl. Bldg. - Instrumentation Room Cntrl. Bldg. - Communication Room Cntrl. Bldg. - Cable Tunnel Between Cntrl. & Aux. Bldgs. - Cable Tunnel Aux. Bldg. - Cable Vault & Rod Cntrl. Areas. - Cable Spreading Area Service Bldg. - Emergency Diesel Generator Bldg. Room	Whenever the equip. being protected is required to be OPERABLE.	CO2 System inoperable for any of the areas. NOTE: Unit 1: System OPERABLE with min. level of 30% & min. pressure of 275 psig in associated storage tank. Unit 2: System OPERABLE with min. level of 81% & min. pressure of 295 psig in the two 10 ton storage tanks (TK-22&23). The backup storage tank (TK-24) shall have min. level of 70% and min. pressure of 295 psig.	a. Establish a continuous fire watch in the affected area(s) with backup fire suppression capability. b. Restore to OPERABLE status.	a. Within 1 hour. b. Within 14 days

TABLE 1 (Page 4 of 5)

NOTE: Prior to removal of any major portion of the FPS or upon discovery that a major piece of FPS equipment or section is out-of-service, the fire insurance carrier (ANI) shall be notified (Refer to SAP 3B).

CAUTION: EXCEEDING OPERABILITY REQUIREMENTS CONSTITUTES A REPORTABLE OCCURANCE (Refer to SAP 13 guidelines and SAP 3B, as applicable).

SYSTEM	REQUIREMENT	APPLICABLE MODES	CONDITION	REQUIRED ACTION	TIME REQUIREMENT
5. Fire Hose Stations	Hos stations serving the following areas shall be OPERABLE: Unit 1 Areas: - Primary Aux. Bldg.* - Fuel Bldg.* - Intake Structure* - Service Bldg. (Safety-Related Areas)* - Safeguards Bldg. (Pipe Tunnel Areas)* - Containment** Unit 2 Areas: - Fuel & Decon Bldg.* - Diesel Generator Bldgs. - Cable Vault Areas & Relay Room - Service Bldg.* - Aux. Bldg.* - Containment** - Cntrl. Bldg. & Cable Tunnel - Safeguards*.	Whenever the equip. in the areas protected by the selected stations is required to be OPERABLE.	One or more selected stations inoperable.	a. Provide equivalent capacity backup hose protection to the unprotected area. *(See NOTES Below) b. Restore to OPERABLE Status.	a. Within 1 hr. (4 hours for cnmt. area hose stations) if the inoperable station is the primary means of fire protection in the affected area; otherwise, within 24 hrs. (See NOTES below) b. Within 14 days.
6. Halon Systems	Halon Systems protecting the following areas shall be OPERABLE. Unit 1 Areas: - Process Equipment Area (Zone 1) - Process Equipment Area (Zone 2) - Cable Tunnel (CV-3)	Whenever the equip. being protected is required to be OPERABLE.	a. One or more of the selected systems inoperable in areas containing redundant systems or components.	a. Establish a continuous fire watch in the affected area with backup fire suppression capability. b. Restore to OPERABLE status.	a. Within 1 hour. b. Within 14 days.

*NOTE: Denotes areas or bldgs. where primary means of fire protection is fire hose racks. Exceptions would be areas or portions covered by auto suppression systems (i.e., Cable Vault areas, DG Bldgs., certain areas of the PAB, etc.).

**NOTE: With Cnmt. area Hose Stations inoperable, check this area during scheduled Cnmt. entries in Modes 1-4 and once per shift in Modes 5 and 6.

TABLE 1 (Page 5 of 5)

NOTE: Prior to removal of any major portion of the FPS or upon discovery that a major piece of FPS equipment or section is out-of-service, the fire insurance carrier (ANI) shall be notified (Refer to SAP 3B).

CAUTION: EXCEEDING OPERABILITY REQUIREMENTS CONSTITUTES A REPORTABLE OCCURANCE (Refer to SAP 13 guidelines and SAP 3B, as applicable).

SYSTEM	REQUIREMENT	APPLICABLE MODES	CONDITION	REQUIRED ACTION	TIME REQUIREMENT
6. (continued)	Unit 2 Areas: - Cntrl. Bldg. Computer Room - Cntrl. Bldg. West Com. Room				
7. Fire Barrier Penetrations	All fire rated assemblies (walls, floor/ceilings, cable tray enclosures and other fire barriers) separating safety related fire areas or separating portions of redundant systems important to safe shutdown within a fire area and all sealing devices in fire rated assembly penetrations (fire doors, fire windows, fire dampers, cable and piping penetration seals & ventilation seals) shall be OPERABLE (Units 1 and 2). *NOTE: Fire wrap for cable and duct work, and fire proof material coating of structural steel would be included in the above defined "fire rated assemblies".	At all times	One or more inoperable.	a. Establish a continuous fire watch on one side of the affected barrier OR b. Verify the OPERABILITY of fire detectors on at least one side of the inoperable barrier AND establish an hourly fire watch patrol. c. Restore to OPERABLE status. *NOTE: Degredation of fire wrap or fire proof material will require: 1) Engineering evaluation OR 2) Establish fire watch per above required actions.	a. Within 1 hour. b. Within 1 hour. c. Within 7 days.

TABLE 1.1

FIRE DETECTION INSTRUMENTS - UNIT 1

As a minimum, the fire detection instrumentation for each fire detection zone shown in the Table below shall be OPERABLE:

Instrument Location	Minimum Instruments Operable	
	Smoke	Heat
1. Control Room		
- Control Room Area	4	N/A
- Computer Room	1	
- Vertical Board	2	
2. Cable Spreading Mezzanine		4*
- East Zone	10	
- West Zone	10	
3. West Cable Vault	3	3*
4. East Cable Vault	3	3*
5. Normal Switchgear Room		N/A
- East Zone	4	
- West Zone	4	
6. A/E Emergency Switchgear Room	3	N/A
7. D/F Emergency Switchgear Room	3	N/A
8. Remote Shutdown Panel		
- Process Instrument Room	8	N/A
- Underfloor Area (NW Area)	(See NOTE 1 below)***	
- Underfloor Area (SW Area)	(See NOTE 1 below)***	
9. Station Battery Rooms (each)	N/A	1/Room
10. Relay Room	1	N/A
11. No. 1 Diesel Generator	2	1*
12. No. 2 Diesel Generator	2	1*
13. Upper Charcoal Filters	N/A	6**

NOTE 1: Zones are associated with a Halon-protected space. Each space has two separate detection circuits (zones). One zone, in its entirety, needs to remain operable.

TABLE 1.1 (continued)

Instrument Location	Minimum Instruments Operable	
	Smoke	Heat
14. Lower Charcoal Filters	N/A	6***
15. Control Room Air Conditioning Room	2	N/A
16. Reactor Trip Breaker Room	3	N/A
17. Primary Auxiliary Bldg. (PAB):		
PAB Elev. 735'	5	7***
PAB Elev. 752'	8	N/A
PAB Elev. 768'	7	N/A
18. Charging Pump Cubicle	1/cubicle	N/A
19. Cable Vault 3 (Elev. 720' on side of Unit 2 Control Room)	4 3****	N/A
20. Intake Structure		
(A, B and C Cubicle)	6/cubicle	N/A
D Cubicle	N/A	1
21. CCR Pump Area	4	4***
22. Auxiliary Feedwater Pump Area	4	4***
23. Cable Penetration Area (Cnmt)#	2/Pen. Area	4***
24. RHR Pump Area(Cnmt)#	2/Pump Area	4***
25. Chemical Addition Building	3	N/A

Table Notations

* Detectors associated with the CO_2 system actuation circuitry.

** Detectors associated with the water suppression system actuation circuitry.

*** Detectors associated with the Halon system actuation circuitry.

(#) The fire detection instruments located within the containment are not required to be OPERABLE during the performance of Type A containment leakage rate tests.

TABLE 1.2

FIRE DETECTION INSTRUMENTS - UNIT 2

As a minimum, the fire detection instrumentation for each fire detection zone shown in the Table below shall be OPERABLE:

Instrument Location	Minimum Instruments Operable		
	Smoke	Flame	Heat
1. Fire Area CB-1; Control Bldg. 707'			
- Zone 11 (Comm., Inst. and Relay Room Under Floor Areas)	11 (See NOTE 2 Below)		
- Zone 2-1 Inst./Relay Room	13*		
- Zone 10 (Inst. and Relay Room)	7 (See NOTE 2 Below)		
- Zone 12 (MCC Room)	1 (See NOTE 2 Below)		
2. Fire Area CB-2; Cable Spreading 725'			
- Zone 23 (Cable Spreading Area)	12 (See NOTE 2 Below)		
- Zone 2-1 Cable Spreading Area	9*		
3. Fire Area CB-3; Control Room			
- Zone 17 (Control Room)	8		
- Zone 67 (Vertical Board)	2		
4. Fire Area CB-4; Computer Room			
- Zone 18 (Computer Room)	1 (See NOTE 2 Below)		
- Zone 210 (Computer Room)	1***		
5. Fire Area CB-5; HVAC Equip. Fan Room 735'6"			
- Zone 19 (HVAC Equip. Fan Room)	2		
- Zone 20 Fan Room (Duct Mounted)	1 (See NOTE 1 Below)		
- Filter 2HVC*FLTA252A (2HVC-FD252A1)			1
- Filter 2HVC*FLTA252B (2HVC-FD252B1)			1

NOTE 1: If duct mounted detector is out of service, verify Fan Room (Zone 19) detectors are operable.

NOTE 2: If the early-warning smoke detectors are OOS for a fire area provided with a backup smoke detection circuit (associated with the CO2 or HALON protected areas), verify the backup alarm system for the affected area is OPERABLE.

TABLE 1.2 (continued)

Instrument Location	Minimum Instruments Operable		
	Smoke	Flame	Heat
6. Fire Area CB-6; West Comm. Room 707'			
- Zone 14 (West Comm. Room - Ceiling Area)	1 (See NOTE 2 Below)		
- Zone 310 (West Comm. Room - Ceiling and Under Floor Areas)	5***		
7. Fire Area CT-1; Cable Tunnel 712'6"			
- Zone 16 (Cable Tunnel North)	4 (See NOTE 2 Below)		
- Zone 15 (Cont. Bldg./Cable Tunnel South)	2 (See NOTE 2 Below)		
- Zone 22 (Cable Tunnel South)	4 (See NOTE 2 Below)		
- Zone 36 (East End of Cable Tunnel)	1 (See NOTE 2 Below)		
- Zone 2-1 Cable Tunnel 712'6"	14*		
8. Fire Area CV-1; Cable Vault (West) 735'			
- Zone 50 (Cable Tunnel/Aux. Bldg.)	3 (See NOTE 2 Below)		
- Zone 2-2 (Cable Tunnel/ Aux. Bldg.)	7*		
- Zone 30 (Cable Vault West)	7 (See NOTE 2 Below)		
- Zone 2-2 (Cable Vault West)	9*		
9. Fire Area CV-2; Cable Vault (East) 735'			
- Zone 31 (Cable Vault East)	5 (See NOTE 2 Below)		
- Zone 2-2A (Cable Vault East)	4*		
10. Fire Area CV-3; Cable Vault 755'			
- Zone 32 (Cable Vault)	11 (See NOTE 2 Below)		
- Zone 2-3 (Cable Vault)	13*		
- Zone 52 (Cable Tunnel/Aux. Bldg., including ASP)	4 (See NOTE 2 Below)		
- Zone 2-3 Cable Tunnel/ Aux. Bldg.	6*		

NOTE 2: if the early-warning smoke detectors are OOS for a fire area provided with a backup smoke detection circuit (associated with the CO2 or HALON protected areas), verify the backup alarm system for the affected area is OPERABLE.

TABLE 1.2 (continued)

Instrument Location	Minimum Instruments Operable		
	Smoke	Flame	Heat
11. Fire Area CV-4; Cable Vault - Fan Room 773'			
- Zone 43 (Emer. Switchgear HVAC)	2		
12. Fire Area CV-5; Personnel Hatch 773'			
- Zone 41 (Hatch Area)	1		
- Zone 42 (Purge Duct Work Area)	2		
13. Fire Area CV-6; Relay Room 755'			
- Zone 53 (Relay Room)	2 (See NOTE 2 Below)		
- Zone 2-7 (Relay Room)	2*		
14. Fire Area DG-1; Diesel Bldg. No. 1			
- Zone 63 (Orange Diesel)		2	
- Zone 2-5 (Orange Diesel)			4*
15. Fire Area DG-2; Diesel Bldg. No. 2			
- Zone 62 (Purple Diesel)		2	
- Zone 2-6 (Purple Diesel)			4*
16. Fire Area FB-1; Fuel/Decon. Bldg.			
- Zone 66 (Fuel Pool Cooling Pumps 739)	1		
- Filter 2HVQ-FLTA227 (2HVQ-FD227)			1**(L)
17. Fire Area MS-1; Main Steam Valve Area			
- Zone 44 Cable Vault Elev. 773'6"	3		
- Zone 45 Fan Room 773'6"	1		
- Zone 46 Compressor Room 773'6"	1		

NOTE 2: If the early-warning smoke detectors are OOS for a fire area provided with a backup smoke detection circuit (associated with the CO2 or HALON protected areas), verify the backup alarm system for the affected area is OPERABLE.

TABLE 1.2 (continued)

Instrument Location	Minimum Instruments Operable		
	Smoke	Flame	Heat
18. Fire Area PA-3; Aux. Bldg.			
- Zone 49A (CCP Heat Exchanger Area 710')	9		
- CCP Area (2FPW-FD270A thru F)			3*
- Zone 49B (Aux. Bldg. 718'6")	7		
- Zone 51A (Aux. Bldg. 735'6")	11		
- Zone 51B (Aux. Bldg. Charging Pump Area)	7		
19. Fire Area PA-4; Aux. Bldg. 755'6"			
- Zone 54A (Aux. Bldg. 755'6" North)	9		
- Zone 54B (Aux. Bldg. 755'6" South)	11		
- Zone 56 (Aux. Bldg. 755'6" Duct Mounted)	2	(See NOTE 1A Below)	
20. Fire Area PA-5; Aux. Bldg. 773'6"			
- Zone 57A Aux. Bldg. 773'6" North (includes Fan Room)	6		
- Zone 57B Aux. Bldg. 773'6" South	11		
- Zone 58 (Duct Mounted)	1	(See NOTE 1B Below)	
- Filter 2HVS*FLTA205A (2HVS-FD205A)			1**(L)
- Filter 2HVS*FLTA205B (2HVS-FD205B)			1**(L)
- Filter 2HVS*FLTA208A (2HVS-FD208A)			1**(L)
- Filter 2HVS*FLTA208B (2HVS-FD208B)			1**(L)
21. Fire Areas PA-6 and 7; Aux. Bldg. 755'6"			
- Zone 55 (MCC Rooms E03 and E04)	1/Room		
22. Fire Area PT-1; Pipe Tunnel 718 6"			
- Zone 40 (Pipe Tunnel Cable Vault)	10		
23. Fire Area SD-1; Service Bldg. - Emergency Switchgear 730'6"			
- Zone 01 (Orange Switchgear)	12		

NOTE 1A: If duct mounted detectors are out of service, verify the Aux. Bldg. 755'6" detector zones (54A and 54B) are operable.

NOTE 1B: If duct mounted detectors are out of service, verify the Aux. Bldg. 773'6" detector zones (57A and 57B) are operable.

TABLE 1.2 (continued)

Instrument Location	Minimum Instruments Operable		
	Smoke	Flame	Heat
24. Fire Area SB-2; Service Bldg. - Emergency Switchgear 730'6"			
- Zone 02 (Purple Switchgear)	11		
25. Fire Area SB-3; Service Bldg. - Cable Tray 745'6"			
- Zone 4A (Northern 2 Rows)	12 (See NOTE 2 Below)		
- Zone 4B (Southern 2 Rows)	12 (See NOTE 2 Below)		
- Zone 2-4 Cable Tray Area 745'6"	13*		
26. Fire Area SB-4; Service Bldg. - Normal Switchgear 760'6"			
- Zone 5A (Normal Switchgear, North)	10		
- Zone 5B (Normal Switchgear, South)	7		
27. Fire Area SB-5; Service Bldg. 780'6"			
- Zone 7A (West End)	8		
- Zone 7B (East End)	7		
- Filter 2GSS-FLTA255A (2GSS-FD255A)			1**(L)
- Filter 2GSS-FLTA255B (2GSS-FD255B)			1**(L)
28. Fire Area SB-6,7,8,9; Battery Rooms 730'6"			
- Zone 03 (Safety Related Battery Rooms 2-1, 2-2, 2-3, 2-4)	1/Room		
29. Fire Area SB-10; Battery Room 760'6"			
- Zone 6 Battery Room 2-5	1		

NOTE 2: If the early-warning smoke detectors are OOS for a fire area provided with a backup smoke detection circuit (associated with the CO2 or HALON protected areas), verify the backup alarm system for the affected area is OPERABLE.

TABLE 1.2 (continued)

Instrument Location	Minimum Instruments Operable		
	Smoke	Flame	Heat
30. Fire Area RC-1; Reactor Containment(#)			
- Zone 64 (Cable Penetration Area)	10		
- Cable Pen. - Purple (2FPW-FD232A/C)			2**
- Cable Pen. - Orange (2FPW-FD233B/D)			2**
- Zone 65 (RHR Pump Area)	1		
- 2RHS*P21A (2FPW-FD231A/B)			1**
- 2RHS*P21B (2FPW-FD230A/B)			1**
- Filter 2HVR*FLTA211A (2HVR-FD211A)			1**(L)
- Filter 2HVR*FLTA211B (2HVR-FD211B)			1**(L)
31. Fire Area SG-1N; North Safeguards Area			
- Zone 26 (Elevation 718'6")	4		
- Zone 28 (Elevation 737'6" and Duct Mounted)	3 (See NOTE 1 Below)		
- Aux. FW Pump (23B) Area (2FPW-FD234A/B)			1**
32. Fire Area SG-1S; South Safeguards Area			
- Zone 27 (Elevation 718'6")	4		
- Zone 29 (Elevation 737'6" and Duct Mounted)	3 (See NOTE 1 Below)		
- Aux. FW Pump (23A) Area (2FPW-FD235A/B)			1**
- Steam Driven Aux. FW Pump (22) Area (2FPW-FD236A/B)			1**

NOTE 1: If duct mounted detectors are out of service, verify the applicable Safeguards Area detectors are operable.

TABLE 1.2 (continued)

Instrument Location	Minimum Instruments Operable		
	Smoke	Flame	Heat
33. Miscellaneous Areas:			
- Zone 59 (Aux. Bldg. - Elev. Mach. Rm.)	1		
- Zone 8 (Service Bldg. Stairwell)	3		
- Zone 24 (Cont. Bldg. NorthStairwell)	1		
- Zone 25 (Cont. Bldg. SouthStairwell)	1		
- Zone 33 (Aux. Bldg. Personnel Passage)	3		
- Zone 34 (Cable Vault Personnel Passage)	3		
- Zone 35 (Turb. Bldg. Personnel Passage)	3		
- Zone 37 (Aux. Bldg. NW Stairs) (EL. 712'6")	1		
- Zone 38 (Cont. Bldg. Personnel Passage 722'6")	2		
- Zone 39 (Control RoomEntrance Way)	3		
- Zone 60 (Aux. Bldg. Personnel Passage)	1		
- Zone 47 (Cable Vault East Stairs)	1		
- Zone 48 (Cable Vault West Stairs)	1		

Table Notations

* Detectors associated with the CO_2 system actuation circuitry.

** Detectors associated with the water suppression system actuation circuitry.

*** Detectors associated with the Halon system actuation circuitry.

(L) Line-type (thermistor cable) heat detector.

(#) The fire detection instruments located within the containment are not required to be OPERABLE during the performance of Type A containment leakage rate tests.

TABLE 2 (Page 1 of 11)

FIRE PROTECTION SYSTEM SURVEILLANCE REQUIREMENTS

NOTE: Each surveillance requirement shall be performed within the specified time interval as defined in the Technical Specifications (Section 4.0.2).

CAUTION: Failure to perform a surveillance requirement constitutes failure to meet OPERABILITY requirements.

SYSTEM	REQUIREMENT	SURVEILLANCE REQUIREMENT	REQUIRED FREQUENCY	REFERENCE UNIT 1 (UNIT 2)
1. Fire Detection instrumentation	Instrumentation for each fire zone protecting safety-related equipment shall be OPERABLE. Unit 1: Refer to Table 1.1 of this SAP. Unit 2: Refer to Table 1.2 of this SAP.	a.1. Each of the fire detection instrmnts. which are accessible durin plant operation shall be demonstrated operable by performing a CHANNEL FUNCTIONAL TEST.	a.1. 6 months	a. OST 1.33.13A OST 1.33.13B OST 1.33.16 (OST 2.33.13A) (OST 2.33.13B) (OST 2.33.16)
		a.2. Fire detectors which are not accessible during plant operation shall be demonstrated OPERABLE by performing a CHANNEL FUNCTIONAL TEST.	a.2. During each COLD SHUTDOWN exceeding 24 hrs. unless performed in previous 6 months.	
		b. The NFPA Standard 72D Class A supervised circuits supervision associated with the detector alarms of each of the fire detection instruments shall be demonstrated OPERABLE.	b. 6 months	b. OST 1.33.13A OST 1.33.13B OST 1.33.16 (OST 2.33.3A) (OST 2.33.13A) (OST 2.33.13B) (OST 2.33.16)
		c. The non-supervised circuits between the local panels and the Control Room shall be demonstrated OPERABLE.	c. Monthly	c. OST 1.33.1A (OST 2.33.3)

TABLE 2 (Page 2 of 11)

SYSTEM	REQUIREMENT	SURVEILLANCE REQUIREMENT	REQUIRED FREQUENCY	REFERENCE UNIT 1 (UNIT 2)
2. Fire Suppression Water System	a. The fire suppression system shall be demonstrated OPERABLE.	a.1. Starting each pump and operate on recirc flow for at least 15 minutes (STAGGERED TEST BASIS).	a.1. Weekly*	a.1. OST 1.33.7 OST 1.33.8
		a.2. Verification that each valve (manual, power operated or auto) in the flow path is in its correct position.	a.2. Monthly	a.2. OST 1.33.1A (OST 2.33.1)
		a.3. Performance of a system yard loop and hydrant flush.	a.3. Annual	a.3. OST 1.33.4 OST 1.33.6 (OST 2.33.4)
		a.4. Cycling of each testable valve in the flow path.	a.4. Annual	a.4. OST 1.33.12 (OST 2.33.12)
		a.5. Performance of a system functional test which includes simulated automatic actuation of the system throughout its operating sequence, and: a) Verifying that each automatic valve in the flow path actuates to its correct position, b) Verifying that each pump develops at least 2500 gpm at a system head of 250 feet,	a.5. 18 months	a.5. OST 1/2.33.12 OST 1.33.12 (OST 2.33.12)

*NOTE: Tested weekly per UFSAR (Section 9.10.4)

TABLE 2 (Page 3 of 11)

SYSTEM	REQUIREMENT	SURVEILLANCE REQUIREMENT	REQUIRED FREQUENCY	REFERENCE UNIT 1 (UNIT 2)
2. (continued)		c) Cycling each valve in the flow path that is not testable during plant operation through at least one complete cycle of full travel, and d) Verifying that each high pressure pump starts (sequentially) to maintain the fire suppression water system pressure greater than or equal to 90 psig.		
		a.6. Performance of a flow test of the system (in accordance with NFPA Handbook, 15th Edition, Section 16, Chap. 8) which includes the entire fire loop (Units 1 and 2).	a.6. Annual*	a.6. OST 1/2.33.12
	b. The diesel fire pump shall be demonstrated OPERABLE.	b.1. Verification of the fuel oil day tank level (greater than or equal to 350 gallons), & starting of the fire pump diesel engine and operating for at least 20 minutes.	b.1. Monthly	b.1. OST 1.33.8
		b.2. Verification that a sample of diesel fuel from the fuel oil day tank is within acceptable limits (Table 1 of ASTM D975-74) when checked for viscosity, water, and sediment.	b.2. Quarterly	b.2. CHM CP 2 (Fuel Oil Specs.) CHM CP 3 FP CHM CP 8 TP-5

*NOTE: Flow tested annually per UFSAR (Section 9.10.4).

TABLE 2 (Page 4 of 11)

SYSTEM	REQUIREMENT	SURVEILLANCE REQUIREMENT	REQUIRED FREQUENCY	REFERENCE UNIT 1 (UNIT 2)
2. (continued)		b.3. Inspection of the fire pump diesel engine in accordance with manufacturer's recommendations.	b.3. 18 months	b.3. MSP 33.01 MSP 33.02
		b.4. Verification that the diesel starts on auto and operates for at least 20 mintues.	b.4. 18 months	b.4. OST 1/2.33.12
	c. The diesel fire pump starting 24 volt battery bank and charger shall be demonstrated OPERABLE.	c.1. Verification of the electrolyte level of each battery & the overall battery voltage for each fire pump diesel starting 24 volt battery bank.	c.1. Weekly	c.1. OST 1.33.8
		c.2. Verification that the specific gravity is appropriate for continued service of the battery.	c.2. Quarterly	c.2. MSP 33.04
		c.3. Inspection of the batteries, to verify that: a) The batteries, cell plates & battery racks show no visual indication of physical damage or abnormal deterioration, & b) The battery-to-battery & terminal connections are clean, tight, free of corrosion & coated with anti-corrosion material.	c.3. 18 months	c.3. MSP 33.03

TABLE 2 (Page 5 of 11)

SYSTEM	REQUIREMENT	SURVEILLANCE REQUIREMENT	REQUIRED FREQUENCY	REFERENCE UNIT 1 (UNIT 2)
2. (continued)	d. The BVPS #2 Booster Pump (capacity 625 gpm) capable of taking suction from the Service Water Sys. (SWS) & aligned to the Unit 2 Hose rack stations for the safety related equipment areas.	d.1. Starting the Booster Pump and operate for at least 15 min.	d.1. Monthly	d.1. (OST 2.33.7)
		d.2. Verification that each valve (manual, power operated or auto) in the flow path is in its correct position.	d.2. Monthly	d.2. (OST 2.33.3)
		d.3. Performance of a system flush (in conjunction with the Unit 1 system flush).	d.3. Annual	d.3. (OST 2.33.4)
		d.4. Cycling of each testable valve in the flow path.	d.4. Annual	d.4. (OST 2.33.12)
		d.5. Performance of a system functional test which includes: a) Verifying that the booster pump develops at least 625 gpm at a sys. head of 250 feet, b) Cycling each valve in the flow path that is not testable during plant operation through at least one complete cycle of full travel, and c) Verifying that the booster pump maintains the fire suppression water system pressure greater than or equal to 90 psig.* (See NOTE Below)	d.5. 18 months	d.5. (OST 2.33.12A)

*NOTE: 90 psig at discharge of Booster Pump and, per NFPA requirements, 65 psig at highest standpipe hose rack.

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SYSTEM	REQUIREMENT	SURVEILLANCE REQUIREMENT	REQUIRED FREQUENCY	REFERENCE UNIT 1 (UNIT 2)
2. (continued)	*e. Fire Hydrants shall be OPERABLE.	*e.1. Hydro test each hydrant to verify barrel integrity following winter freeze.	*e.1. Annual	*e.1. OST 1.33.4 (OST 2.33.4)
		*e.2. Inspection of each hydrant to ensure hydrant barrels are dry and threads are lubricated.	*e.2. 6 months (spring and fall)	*e.2. OST 1.33.4 (OST 2.33.4)
	*f. Hose Cabinets and Cart Houses	*f.1. Inspection of each hose cabinet & cart house located within the perimeter of the plant protected area to verify adequate inventory.	*f.1. 6 months	*f.1. OST 1.33.5 (OST 2.33.5)
3. Spray and/or Sprinkler System	The following areas applicable to Units 1 & 2 shall be OPERABLE: - Cnmt. (RHR Area) - Cnmt. (Cable Pen. Area) - Aux. FW Pump Areas - CCR Pump Areas - Main Filter Banks - Cnmt. Iodine Charcoal Filters (BV-2) - PAB 735, 752 and 768 levels (BV-1)	a. Verification that each valve (manual, power operated or auto) in the flow path is in its correct position.	a. Monthly	a. OST 1.33.1A (OST 2.33.1)
		b. Cycling of each testable valve in the flow path.	b. Annual	b. OST 1.33.6 OST 1.33.12 OST 1.33.13B (OST 2.33.6) (OST 2.33.12) (OST 2.33.13B)
		c.1. Performance of a system functional test which includes simulated automatic actuation of the system, and: a) Verifying that the automatic valves in the flow path actuate to their correct positions on a manual test signal, and	c.1. 18 months	c.1. OST 1.33.12 OST 1.33.13D OST 1.33.21 (OST 2.33.12) (OST 2.33.13D) (OST 2.33.21)

*Ref: T.S. Amendment No. 18 (Fire Protection SER; dated June 6, 1979)

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SYSTEM	REQUIREMENT	SURVEILLANCE REQUIREMENT	REQUIRED FREQUENCY	REFERENCE UNIT 1 (UNIT 2)
3. (continued)		b) Cycling each valve in the flow path that is not testable during plant operation through at least one complete cycle of full travel.		
		c.2. Inspection of the dry pipe spray and sprinkler headers to verify integrity.	c.2. 18 months	c.2. OST 1.33.13D OST 1.33.21 (OST 2.33.13D) (OST 2.33.21)
		c.3. Inspection of each nozzle's spray area to verify the spray pattern is not obstructed.	c.3. 18 months	c.3. OST 1.33.13D OST 1.33.21 (OST 2.33.13D) (OST 2.33.21)
		d. Performance of an air flow test through each open head spray/ sprinkler header to verify each open nozzle is unobstructed.	d. 3 years	d. BVT 1.1 - 1.33.1 Main Filter Banks BVT 1.1 - 1.33.2 Cnmt. Cable Pen (BVT 2.1 - 1.33.1) (BVT 2.1 - 1.33.2)

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SYSTEM	REQUIREMENT	SURVEILLANCE REQUIREMENT	REQUIRED FREQUENCY	REFERENCE UNIT 1 (UNIT 2)
4. CO2 System	CO2 Systems serving the following areas shall be OPERABLE: Unit 1 Areas: - Cable Tray Mezzanine - Cable Vaults - Diesel Generator Rooms Unit 2 Areas: - Cable Spreading Area Control Bldg. - Instrumentation Room Control Bldg. - Communication Room Control Bldg. - Cable Tunnel Between Control & Aux. Bldgs. - Cable Tunnel Aux. Bldg. - Cable Vault & Rod Control Areas - Cable Spreading Area Service Bldg. - Emergency Diesel Generator Bldg. Room	a. Verification of the associated CO2 storage tank levels & pressures. b. Verification that the system (valves and associated dampers) actuates manually & automatically upon receipt of simulated signal. c. Verification of flow from each nozzle during a "puff test".	a. Weekly b. 18 months c. 18 months	a. OST 1.33.9 (OST 2.33.9) b. OST 1.33.13C (OST 2.33.13C) c. OST 1.33.13C (OST 2.33.13C)
5. Fire Hose Stations	Hose stations serving the following areas shall be OPERABLE: Unit 1 Areas: - Primary Aux. Bldg. - Fuel Bldg. - Intake Structure - Service Bldg. (Safety-Related Areas) - Safeguards Bldg. (Pipe Tunnel Areas) - Containment Unit 2 Areas: - Fuel & Decon Bldg. - Diesel Generator Bldgs. - Cable Vault Areas & Relay Room - Service Bldg. - Aux. Bldg. - Containment - Control Bldg. & Cable Tunnel - Safeguards	a. Inspection of the fire hose stations accessible during plant operations to assure all required equipment is at the station. b.1. Inspection of the fire hose stations not accessible during plant operations to assure all required equip. is at the station. b.2. Removal of the hose for inspection and re-racking. b.3. Inspection of all gaskets & replacing any degraded gaskets in the couplings.	a. Monthly b.1. 18 months b.2. 18 months b.3. 18 months	a. OST 1.33.2 (OST 2.33.2) b.1. OST 1.33.2 (OST 2.33.2) b.2. OST 1.33.2 (OST 2.33.2) b.3. OST 1.33.2 (OST 2.33.2)

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SYSTEM	REQUIREMENT	SURVEILLANCE REQUIREMENT	REQUIRED FREQUENCY	REFERENCE UNIT 1 (UNIT 2)
5. (continued)		c.1. Partial opening of each hose station valve to verify valve operability & no flow blockage. c.2. Performance of a hose hydrostatic test at least 50 psig above max. fire main operating pressure.	c.1. 3 years c.2. 3 years* *NOTE: All hoses stored in heated areas shall be hydro-tested at least every 3 years. All hoses stored outdoors or in unheated building areas shall be hydro-tested at least every 18 months.	c.1. OST 1.33.2 (OST 2.33.2) OST 1.33.13D (Service Bldg. Hose Reel Stations) OST 1.33.30 (Cnmt. Hose Reel Stations) c.2. OST 1.33.12 (OST 2.33.2)
6. Halon Systems	Halon Systems protecting the following areas shall be OPERABLE: Unit 1 Areas: - Process Equipment Area (Zone 1) - Process Equipment Area (Zone 2) - Cable Tunnel (CV-3) Unit 2 Areas: - Contrci Bldg. Computer Room - Control Bldg. West Com. Room	a. Verification that each valve (manual, power operated or auto) in the flow path is in its correct position. b. Verification of Halon storage (tank weight greater than or equal to 95% of full charge) weight (or level) & pressure greater than or equal to 90% of full charge pressure. c. Verification that the system actuates manually and automatically upon receipt of simulated actuation signal. d. Performance of a flow test to assure no blockage.	a. Monthly b. Semi-annual c. 18 months d. 3 years	a. OST 1.33.20 (OST 2.33.18) b. OST 1.33.22 (OST 2.33.18) c. OST 1.33.23 (OST 2.33.20) d. BVT 1.1 - 1.33.3 (BVT 1.2 - 2.33.1)

*Ref: T.S. Amendment No. 18 (Fire Protection SER; dated June 6, 1979).

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SYSTEM	REQUIREMENT	SURVEILLANCE REQUIREMENT	REQUIRED FREQUENCY	REFERENCE UNIT 1 (UNIT 2)
7. Fire Barrier Penetrations	All fire rated assemblies (walls, floor/ceilings, cable tray enclosures and other fire barriers) separating safety related fire areas or separating portions of redundant systems important to safe shutdown within a fire area & all sealing devices in fire rated assembly penetrations (fire doors, fire windows, fire dampers, cable & piping penetration seals & ventilation seals) shall be OPERABLE (Units 1 & 2).	a.1. Inspection of the exposed surfaces of each fire rated assembly.	a.1. 18 months	a.1. BVT 1.1 - 1.33.5 (BVT 2.1 - 1.33.5)
		a.2. Inspection of each fire window/fire damper & associated hardware.	a.2. 18 months	a.2. BVT 1.1 - 1.33.5 (BVT 2.1 - 1.33.5)
		a.3. Inspection of at least 10% of each type (electrical & mechanical) of sealed penetration. If apparent changes in appearance or abnormal degradations are found, a visual inspection of an additional 10% of each type of sealed penetration shall be made. This inspection process shall continue until a 10% sample with no apparent changes in appearance or abnormal degradation is found.	a.3. 18 months	a.3. BVT 1.1 - 1.33.5 (BVT 2.1 - 1.33.5)
		b.1. Inspection of the automatic hold-open, release & closing mechanism & latches of the required fire doors.	b.1. Semi-annual	b.1. OST 1.33.5 (OST 2.33.5)
		b.2. Verification that each unlocked fire door without electrical supervision is closed.	b.3. Daily (24 hours)	b.3. OM 1.54.3, L3-1-2, OL3-1-2, L4-1-1 & OL4-1-1 "Fire Door Check" Logs (OM 2.54.3, L14-1 thru 5 "Fire Door Check" Logs)

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SYSTEM	REQUIREMENT	SURVEILLANCE REQUIREMENT	REQUIRED FREQUENCY	REFERENCE UNIT 1 (UNIT 2)
7. (continued)		b.3. Verification that doors with automatic hold-open & release mechanisms are free of obstructions.	b.2. Daily (24 hours)	b.2. OM 1.54.3, L3-1-2, OL3-1-2, L4-1-1 & OL4-1-1 "Fire Door Check" Logs (OM 2.54.3, L14-1 thru 5 "Fire Door Check" Logs)

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FIRE INSURANCE (ANI) OPERABILITY REQUIREMENTS FOR FIRE PROTECTION SYSTEM

NOTE: Prior to removal of any major portion of the FPS or upon discovery that a major piece of FPS equipment or section is out-of-service, the fire insurance carrier (ANI) shall be notified (Refer to SAP 3B).

SYSTEM	REQUIREMENT	APPLICABLE MODES	CONDITION	REQUIRED ACTION	TIME REQUIREMENT
a. Fire Detection Instrumentation	Instrumentation for each fire zone protecting non-safety related equipment shall be operable. Unit 1: - Guardhouse - Alternate Access Facility Unit 2: - SOSB - PAF Out Bldgs. - ERF Sub. Bldg. - Black D.G. Bldg. - ERF - Training Bldg. - Simulator Bldg. - Waste Hdlg. Bldg. - Admin. Bldg. - Meteorological Shelter	Whenever the equip. that is being protected is operational or required to be operable.	With the number of operable fire detection instruments less than 50% of total	Establish a fire watch patrol at least once an hour in the affected area whenever affected area is unmanned.	Within 4 hours

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SYSTEM	REQUIREMENT	APPLICABLE MODES	CONDITION	REQUIRED ACTION	TIME REQUIREMENT
2.a. Fire Suppression Water System (Applicable to Units 1 & 2 and Out-Bldgs.)	Operable flow path to non-safety related areas.	At all times.	Flow path inoperable	Restore to operable status OR Provide backup fire suppression to affected area OR Establish an hourly fire watch patrol to affected area(s).	Within 4 hours.
2.b. Yard Area Fire Hydrants and associated Hose Cabinets and Cart Houses (Applicable to Units 1 & 2 and Out-Bldgs.)	The fire hydrant shall be operable and associated hose cabinets & cart houses properly stocked.	At all times.	a. One hydrant inoperable.	a. Operations/Brigade personnel cognizant of status in event of fire in affected area.	a. N/A
			b. Any two (2) adjacent hydrants inoperable.	b. Provide backup hose protection to affected area (weather permitting) OR Establish an hourly fire watch patrol for affected area(s).	b. Within 4 hours.

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SYSTEM	REQUIREMENT	APPLICABLE MODES	CONDITION	REQUIRED ACTION	TIME REQUIREMENT
3. Spray and/or Sprinkler System	The following water sprinkler systems serving non-safety related areas shall be operable: Unit 1 Areas: - Turbine Bldg. (Mezzanine and basement floors) - H2 Seal Oil Unit - Lube Oil Reservoir - Lube Oil Storage Room - Aux. Boiler Room - Main Steam Pipe Chase (opening from Turbine Bldg.) - Warehouse Area - PCA Machine Shop - Clean Shop - Chemistry Lab - Guardhouse - Yard Area Transformers Unit 2 Areas: - Turbine Bldg. (Mezzanine and basement floor) - H2 Seal Oil Unit - Gland Steam Exhaust Filters - Lube Oil Reservoir - Main Steam Pipe Chase - Pipe Opening to Waste Handling Bldg. - Condensate Polishing Bldg. - Waste Hdlg. Bldg. - Health Physics Bldg. - SOSB - PAF - Dosimetry Bldg. - Schneider/Constr. Bldg. - Yard Area Transformers	Whenever the equip. being protected is operational or required to be operable.	One or more of the selected portions in operable.	Establish an hourly fire watch patrol in in the affected area to check for proper cooling, no oil leakage, or any abnormal conditions.	Within 4 hours.

FIRE INSURANCE (ANI) OPERABILITY REQUIREMENTS FOR F.P.S. - TABLE 3 (page 4 of 10)

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SYSTEM	REQUIREMENT	APPLICABLE MODES	CONDITION	REQUIRED ACTION	TIME REQUIREMENT
2. (continued)	Common facilities - ERF - - Offsite Warehouse - - Simulator Bldg. - - Waste Hdlg. Bldg. (Switchyard) - - Site Engr. Bldg. - - Paint Shop - - Warehouse C & D				

TABLE 3 (Page 5 of 10)

SYSTEM	REQUIREMENT	APPLICABLE MODES	CONDITION	REQUIRED ACTION	TIME REQUIREMENT
4. CO2 System	The following CO2 Systems serving non-safety related areas shall be operable: Unit 1 Areas: - Turbine/Generator Area (5 Ton CO2 System) - Guardhouse (D.G. Room) Unit 2 Areas: - Turbine/Generator Area (7.5 Ton CO2 System) Common Facilities: - ERF Substation Bldg. - ERF Black D.G. Bldg.	Whenever the equip. being protected is operational, or required to be operable.	CO2 System inoperable for any of the areas.	Establish an hourly fire watch patrol in the affected area(s) to check for proper cooling, no oil leakage, or any abnormal conditions.	Within 4 hours.

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SYSTEM	REQUIREMENT	APPLICABLE MODES	CONDITION	REQUIRED ACTION	TIME REQUIREMENT
5. Fire Hose Stations	Hose stations serving the following non-safety related areas shall be operable: Unit 1 Areas: - Turbine Bldg. - Warehouse Area - Water Treatment* - Aux. Boiler Rm. - Guardhouse Unit 2 Areas: - Turbine Bldg. - Condensate Polishing Bldg. - Waste Handling Bldg. - Health Physics Area - SOSB Common facilities - Admin. Bldg.* - PAF - Offsite Warehouse - Waste Handling Bldg. (Switchyard) - Simulator Bldg.	Whenever the equip. in the areas protected by the selected stations is operational or required to be operable.	One or more selected stations inoperable.	a. Provide equivalent capacity backup hose protection to the unprotected area if the inoperable station is the primary means of fire protection in the affected area. OR b. Establish an hourly fire watch patrol for the affected area(s).	a. Within 4 hours. b. Within 4 hours.

*NOTE: Denotes areas where primary means of fire protection is fire hose racks.

FIRE INSURANCE (ANI) OPERABILITY REQUIREMENTS FOR F.P.S. - TABLE 3 (page 7 of 10)

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SYSTEM	REQUIREMENT	APPLICABLE MODES	CONDITION	REQUIRED ACTION	TIME REQUIREMENT
B. Halon Systems	Halon Systems protecting the following non-safety related areas shall be operable. Unit 1 Areas: - Guardhouse (CAS) - Warehouse (Equip. I&C Room) Unit 2 Areas: - PAF (SAS) - PAF (Tele. Equip. Rm.) - 305B (Records Rm.) - 505B (Comm. Rm.) Out Bldgs. - ERF (Comp., Comm. Equip., E.O.F.'s Office, EOF, Records Rooms and TSC Subfloor). - Simulator Bldg. (Simulator, Comp. and Records Rm.) - Admin. Bldg. (Records Room)	Whenever the equip. being protected is operational or required to be operable.	a. One or more of the selected systems inoperable.	a. Establish an hourly fire watch patrol for the room whenever affected room is unmanned.	a. Within 4 hours.

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SYSTEM	REQUIREMENT	APPLICABLE MODES	CONDITION	REQUIRED ACTION	TIME REQUIREMENT
7. Fire Barrier Penetrations	All fire rated assemblies and all applicable penetration seals (including fire doors, fire dampers, etc.) associated with areas protected by total flooding CO2 or Halon Systems shall be operable: Unit 1: - Guardhouse (D.G. Room CO2 System) - Guardhouse (CAS Room Halon System) - Warehouse I&C Equip. Room (Halon System) Unit 2 - PAF (SAS Room Halon System) - PAF (Tele. Equip. Room Halon System) - SOSB (Records Room Halon System) - SOSB (Comm. Rm. Halon System) Common Facilities - ERF Substation & Black DG Bldgs. (CO2 System) - ERF (Halon System) - Simulator Bldg. (Halon System) - Admin. Bldg. (Records Room)	At all times (unless testing or preventive maintenance is being performed on the equipment/area protected by CO2 or Halon which requires the fire system to be O.O.S.)	One or more inoperable.	Establish an hourly fire watch for the affected areas whenever the affected areas are unmanned.	Within 4 hours.

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SYSTEM	REQUIREMENT	APPLICABLE MODES	CONDITION	REQUIRED ACTION	TIME REQUIREMENT
B. Foam System for the Aux. Boiler Fuel Oil Storage Tank (Unit 1)	The foam system shall be operable.	Whenever fuel oil stored in tank.	The foam system inoperable.	Ensure portable foam eductor with adequate foam supply (at least 50 gal.) available in foam house.	Within 4 hours.

FIRE INSURANCE (ANI) OPERABILITY REQUIREMENTS FOR F.P.S. - TABLE 3 (page 10 of 10)

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	SYSTEM	REQUIREMENT	APPLICABLE MODES	CONDITION	REQUIRED ACTION	TIME REQUIREMENT
9.	Fire Extinguishers (Applicable to Units 1 & 2, and Out-Bldgs.)	Fire extinguishers shall be operable and in their designated locations.	At all times.	Fire extinguishers inoperable or missing from designated location.	Replace fire extinguisher with equivalent size and type.	Within 24 hours.

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FIRE INSURANCE (ANI) SURVEILLANCE REQUIREMENTS FOR FIRE PROTECTION SYSTEM

SYSTEM	REQUIREMENT	SURVEILLANCE REQUIREMENT	REQUIRED FREQUENCY	REFERENCE UNIT 1 (UNIT 2)
1. Fire Detection Instrumentation	Instrumentation for each fire zone protecting non-safety related equipment shall be operable. Unit 1: - Guardhouse - Alternate Access facility Unit 2: - SOSB - PAF Out-Bldgs.: - ERF Sub. Bldg. - Black D.G. Bldg. - ERF - Training Bldg. - Simulator Bldg. - Waste Hdlg. Bldg. - Admin. Bldg. - Meteorological Shelter	a. Each of the fire detection instruments and the supervised circuits associated with the detector alarms shall be demonstrated operable.	a.1. 6 months a.2. Annual	a.1. Unit 1(2): OST 1.33.16 (OST 2.33.16) a.2. Out-Bldgs.: OST 1.33.18 (Admin. Bldg.) OST 1.33.24 (ERF) OST 1.33.28 (Sim. and Trng. Bldgs.) OST 1.33.29 (ERFS)

FIRE INSURANCE (ANI) SURVEILLANCE REQUIREMENTS - TABLE 4 (page 2 of 10)

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SYSTEM	REQUIREMENT	SURVEILLANCE REQUIREMENT	REQUIRED FREQUENCY	REFERENCE UNIT 1 (UNIT 2)
2.a. Fire Suppression Water System (Applicable to Units 1 & 2 and Out-Bldgs.)	Operable flow path to non-safety related areas.	a. Verification that each valve in the flow path is in its correct position and perform drain test.	a. Quarterly	a. Unit 1(2): OST 1.33.18 (OST 2.33.3) Out-Bldgs.: OST 1.33.24 OST 1.33.26
		b. Cycling of each valve in the flow path.	b. Annual	b. OST 1.33.12 (OST 2.33.12) OST 1.33.24 OST 1.33.26
2.b. Yard Area Fire Hydrants and associated Hose Cabinets and Cart Houses (Applicable to Units 1 & 2, and Out-Bldgs.)	The fire hydrants shall be operable and associated hose cabinets and cart houses properly stocked.	a. Verify operability of hydrants and ensure barrels are dry and threads lubricated.	a. 6 months	a. OST 1.33.4 (OST 2.33.4)
		b. Performance of a hydrant flush test and verify barrel integrity.	b. Annual	b. OST 1.33.4 (OST 2.33.4)
		c. Inspection and inventory of hose cabinets and cart houses.	c. 6 months	c. OST 1.33.5 (OST 2.33.5)

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SYSTEM	REQUIREMENT	SURVEILLANCE REQUIREMENT	REQUIRED FREQUENCY	REFERENCE UNIT 1 (UNIT 2)
3. Spray and/or Sprinkler System	The following water sprinkler systems serving non-safety related areas shall be operable: Unit 1 Areas: - Turbine Bldg. (Mezzanine and basement floors) - H2 Seal Oil Unit - Lube Oil Reservoir - Lube Oil Storage Room - Aux. Boiler Room - Main Steam Pipe Chase (opening from Turbine Bldg.) - Warehouse Area - PCA Machine Shop - Clean Shop - Chemistry Lab - Guardhouse - Yard Area Transformers Unit 2 Areas: - Turbine Bldg. (Mezzanine and basement floor) - H2 Seal Oil Unit - Gland Steam Exhaust Filters - Lube Oil Reservoir - Main Steam Pipe Chase - Pipe Opening to Waste Handling Bldg. - Condensate Polishing Bldg. - Waste Handling Bldg. - Health Physics Bldg. - SOSB - PAF - Dosimetry Bldg. - Schneider/Construction Bldg. - Yard Area Transformers	a. Verification that each valve in the flow path is in its correct position.	a.1. Monthly a.2. Quarterly	a.1. Unit 1(2): OST 1.33.1 (OST 2.33.1) a.2. Out-Bldgs.: OST 1.33.24 OST 1.33.26
		b. Cycling of each testable valve in the flow path.	b. Annual	b.1. Unit 1(2): OST 1.33.6 OST 1.33.12 (OST 2.33.6) (GST 2.33.12) b.2. Out-Bldgs.: OST 1.33.24 OST 1.33.26
		c. Performance of a sys. functional test and verifying that automatic valves in the flow path actuate correctly.	c. 18 Months	c.1. Unit 1(2): OST 1.33.6 (OST 2.33.10A) c.2. Out-Bldgs.: OST 1.33.24 OST 1.33.26

FIRE INSURANCE (ANI) SURVEILLANCE REQUIREMENTS - TABLE 4 (page 4 of 10)

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SYSTEM	REQUIREMENT	SURVEILLANCE REQUIREMENT	REQUIRED FREQUENCY	REFERENCE UNIT 1 (UNIT 2)
B. (continued)	Common Facilities: - ERF - - Offsite Warehouse - - Simulator Bldg. - - Waste Handling Bldg. (Switchyard) - - - Site Engr. Bldg. - - - Paint Shop - - - Warehouse C&D			

TABLE 4 (Page 5 of 10)

SYSTEM	REQUIREMENT	SURVEILLANCE REQUIREMENT	REQUIRED FREQUENCY	REFERENCE UNIT 1 (UNIT 2)
4. CO2 System	The following CO2 Systems serving Non-Safety Related Areas shall be operable: Unit 1 Areas: - Turbine/Generator Area (5 Ton CO2 System) - Guardhouse (D.G. Room) Unit 2 Area: - Turbine/Generator Area (7.5 Ton CO2 System) Common Facilities: - ERF Substation Bldg. - ERF Black D.G. Bldg.	a. Verification of the CO2 storage tank level & pressure. b. Verification that the system actuates manually and automatically open receipt of simulated signal. c. Performance of a "Puff Test".	a. Weekly b. 18 months c. 18 months	a. OST 1.33.9 (OST 2.33.9 b.1. Unit 1(2): OST 1.33.10 (OST 2.33.10) b.2. Out Bldgs.: OST 1.33.29 c.1. Unit 1(2): OST 1.33.10 (OST 2.33.13B) c.2. Out-Bldgs.: OST 1.33.29

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SYSTEM	REQUIREMENT	SURVEILLANCE REQUIREMENT	REQUIRED FREQUENCY	REFERENCE UNIT 1 (UNIT 2)
5. Fire Hose Stations	Hose stations serving the following non-safety related areas shall be operable: Unit 1 Areas: - Turbine Bldg. - Warehouse Area - Water Treatment - Aux. Boiler Room - Guardhouse Unit 2 Areas: - Turbine Bldg. - Condensate Polishing Bldg. - Waste Handling Bldg. - Health Physics Area - SOSB Common Facilities: - Admin. Bldg. - PAF - Offsite Warehouse - Waste Handling Bldg. (Switchyard) - Simulator Bldg. - SAPS Visitors Center - SAPS T&T Bldg.	a. Inspection of the hose stations and associated hose, inspection of all gaskets and replacing any degraded hose or gaskets. b. Partially opening each hose station to verify valve operability and no flow blockage. c. Performance of a hose hydro test.	a. Annual b. 3 years c. 3 years	a. OST 1.33.2 (OST 2.33.2) Out-Bldgs.: OST 1.33.25 b. OST 1.33.2 (OST 2.33.2) Out-Bldgs.: OST 1.33.25 c. OST 1.33.2 (OST 2.33.2) Out-Bldgs.: OST 1.33.25

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SYSTEM	REQUIREMENT	SURVEILLANCE REQUIREMENT	REQUIRED FREQUENCY	REFERENCE UNIT 1 (UNIT 2)
5. Halon Systems	Halon Systems protecting the following non-safety related areas shall be operable. Unit 1 Areas: - Guardhouse (CAS) - Warehouse (Equipment I&C Room) Unit 2 Areas: - PAF (SAS) - PAF (Tele. Equip. Rm.) - SOSB (Records Room) - SOSB (Comm. Room) Out-Bldgs.: - ERF Rooms - Simulator Bldg. Rooms - Admin. Bldg. (Records Room)	a. Verification that each valve in the flow path is in its correct position. b. Verification of Halon storage & weight (or level) & pressure. c. Verification that the system actuates manually and automatically upon receipt of simulated actuation of signal.	a. Monthly b. Annual c. Annual	a. OST 1.33.20 (OST 2.33.18) b. Out-Bldgs.: OST 1.33.27 (Sim. Bldg.) OST 1.33.18 (Admin. Bldg.) OST 1.33.31 (ERF) c. OST 1.33.23 (OST 2.33.24) Out-Bldgs.: OST 1.33.27 (Sim. Bldg.) OST 1.33.18 (Admin.) OST 1.33.31 (ERF)

TABLE 4 (Page 8 of 10)

SYSTEM	REQUIREMENT	SURVEILLANCE REQUIREMENT	REQUIRED FREQUENCY	REFERENCE UNIT 1 (UNIT 2)
7. Fire Barrier Penetrations	All fire rated assemblies and all applicable penetration seals (including fire doors, fire dampers etc.) associated with areas protected by total flooding CO2 or Halon Systems shall be operable (Units 1 & 2). Unit 1: - Guardhouse (D.G. Room CO2 System) - Guardhouse (CAS Room Halon System) - Warehouse I&C Equip. Room (Halon System); Unit 2 - PAF (SAS Room Halon System) - PAF (Tele. Equip. Room Halon System) - SOSB (Records Room Halon System) - SOSB (Comm. Rm. Halon System) Common Facilities - ERF Substation & Black DG Bldgs. (CO2 System) - ERF (Halon System) - Simulator Bldg. (Halon System) - Admin. Bldg. (Records Room)	a. Verification that the fire doors are operable and free of obstructions.	a.1. 6 months a.2. Annual	a.1. Unit 1(2): OST 1.33.5 (OST [illegible] 33.5) a.2. Out-Bldgs.: OST 1.33.25

TABLE 4 (Page 9 of 10)

SYSTEM	REQUIREMENT	SURVEILLANCE REQUIREMENT	REQUIRED FREQUENCY	REFERENCE UNIT 1 (UNIT 2)
B. Foam System for the Aux. Boiler Fuel Oil Storage Tank (Unit 1)	The foam system shall be operable.	Performance of a functional test of the foam system and determine satisfactory quality of foam.	Annual	OST 1.33.11

TABLE 4 (Page 10 of 10)

SYSTEM	REQUIREMENT	SURVEILLANCE REQUIREMENT	REQUIRED FREQUENCY	REFERENCE UNIT 1 (UNIT 2)
9. Fire Extinguishers (Applicable to Units 1 & 2, and Out-Bldgs.)	Fire extinguishers shall be operable and in their designated locations.	a. Verify each fire extinguisher is operable and in its correct position.	a. Monthly	a. OST 1.33.15A, B & C (OST 2.33.15A, B & C)
		b. Perform maintenance checks on each extinguisher and check weight of the gas suppression-type (Halon + CO2) fire extinguishers.	b. Annual	b. PMP 1-33-FP-EXT-1M PMP 1-33-FP-EXT-2M (PMP 2-33-FP-EXT-1M) (PMP 2-33-FP-EXT-2M)

ATTACHMENT A

INSTRUCTIONS

UPDATED FIRE PROTECTION APPENDIX R REVIEW REPORT - BVPS UNIT 1

FIRE PROTECTION SAFE SHUTDOWN REPORT - BVPS UNIT 2

These instructions define the methods and responsibilities for the initiation, review, approval and distribution of changes to the BVPS Unit 1 Updated Fire Protection Appendix R Review Report and the BVPS Unit 2 Fire Protection Safe Shutdown Report.

INSTRUCTIONS

1. All proposed changes to the Fire Protection Reports shall be prepared utilizing the Fire Protection Report Proposed Change Form (Figure 1A).

2. Personnel who present items for OSC review involving design changes, procedures and NRC correspondence shall determine if the design changes or procedures affect the Unit 1 or Unit 2 Fire Protection Reports and, if so, notify NED by forwarding a completed Proposed Change Form to the Nuclear Engineering Manager for processing with a copy of the OSC approved safety evaluation.

3. NED shall assign a sequential reference number and shall coordinate review of each proposed change. Review responsibilities are identified in Table 1A (Unit 1) and Table 2A (Unit 2).

4. The assigned section reviewers shall perform the technical review of the proposed change(s) within the date noted on the review sheet. Any comments shall be jointly resolved and dispositioned by NED and the Licensing Section/Fire Protection Group.

5. NED shall coordinate the review by OSC and ORC.

6. NED shall coordinate word processing, reproduction and distribution.

ATTACHMENT A (continued)

TABLE 1A

Unit 1
Fire Protection
Appendix R Review Report
Sections Review Responsibilities

Section	Title	*PRI	*SEC	SEC
1	INTRODUCTION	MNE	MNS	SLS
2	HISTORICAL BACKGROUND	MNS	MNE	SLS
3	UNIT DESCRIPTION	MNE	SLS	FPE
4	SHUTDOWN CAPABILITY SUMMARY	PM	MNS	SLS
5	ELECTRICAL ANALYSIS	MNE	SLS	FPE
6	RESOLUTION OF PROBLEM AREAS	MNE	SLS	FPE
7	PROCEDURES (OM 56C)	PM	SLS	FPE
8	IDENTIFICATION OF HIGH/LOW PRESSURE SYSTEM INTERFACES	MNE	SLS	FPE
9	UPDATED RESPONSE TO NRC STAFF'S GENERIC LETTER 81-12	MNE	MNS	SLS
10	APPENDIX R REQUIREMENTS J AND O (RCP OIL COLLECTION AND EMERGENCY LIGHTING)	MNE	SLS	FPE
11	EXEMPTIONS	MNS	SLS	FPE
12	SCHEDULE FOR COMPLIANCE	MNS	SLS	FPE

* PRI - Primary Responsibility
* SEC - Secondary Responsibility

APPENDIX R REPORT REVIEWER INDEX

MNS - Manager, Nuclear Safety

SLS - Senior Licensing Supervisor

FPE - Fire Protection Engineer

MNE - Manager, Nuclear Engineering

PM - Plant Manager (or Asst.)

ATTACHMENT A (continued)

TABLE 2A

Unit 2
Fire Protection
Safe Shutdown Report
Sections Review Responsibilities

Section	Title	*PRI	*SEC	SEC
1	INTRODUCTION	MNE	MNS	SLS
2	SYSTEMS	PM	MNS	SLS
3	FIRE AREA REVIEW	MNE	SLS	FPE
APPENDIX A1	FIRE AREA DRAWINGS	MNE	SLS	FPE
APPENDIX A2	EQUIPMENT AND COMPONENTS CONTROLLED FROM ALTERNATE SHUTDOWN PANEL	PM	MNS	SLS
APPENDIX A3	CABLE MATRIX	MNE	SLS	FPE
APPENDIX A4	FIRE PROTECTION SAFE SHUTDOWN ANALYSIS PROCEDURE	PM	MNS	SLS
APPENDIX A5	BREAKER COORDINATION STUDY	MNE	SLS	FPE
APPENDIX A6	REFERENCES	MNE	SLS	FPE
TABLE 1	FIRE HAZARDS ANALYSIS	MNE	SLS	FPE

* PRI - Primary Responsibility
* SEC - Secondary Responsibility

APPENDIX R REPORT REVIEWER INDEX

MNS - Manager, Nuclear Safety

SLS - Senior Licensing Supervisor

FPE - Fire Protection Engineer

MNE - Manager, Nuclear Engineering

PM - Plant Manager (or Asst.)

ATTACHMENT A (continued)

FIGURE 1A

PROPOSED CHANGE FORM

APPLICABLE FIRE PROTECTION REPORT (check one):

☐ Updated Fire Protection Appendix R Review Report - BVPS Unit 1
☐ Fire Protection Safe Shutdown Report - BVPS Unit 2

TO BE COMPLETED BY THE INITIATING GROUP:

List Page(s), Table (T), or Figure (F) numbers to be changed. (Attach marked up pages showing proposed changes). _____

_____

_____

Reason for change: _____

_____

_____

_____ _____ _____ _____
Prepared By Date Reviewed by (DLC Supervision) Date

TO BE COMPLETED BY NED (Designated FPARRR Coordinator)

Date Received _____ Reference No. _____

_____ _____
NED (FPARRR Coordinator or designee) Date Sent Out for Review

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TO BE COMPLETED BY FIRE PROTECTION REPORT SECTION REVIEWERS:

			No Comments	Comments Attached
Primary	_____	Date _____	☐	☐
Secondary	_____	Date _____	☐	☐
Secondary	_____	Date _____	☐	☐

OSC Review Date _____ Meeting No. _____
ORC Review Date _____ Meeting No. _____

Effective Date of Change: _____ Rev. No. _____