

ATTACHMENT A

Proposed Changes to Appendix A

Technical Specifications to

Operating License Nos. DPR-19 and 25

The following changes to the Technical Specifications should be made:

Page

- 156d to 156i Changed references from either Section 6.6.B.1 or 6.6.B.2 to 6.6.B.
- 158 Paragraph 6.1.F was revised in the original submittal. However, after discussions with the NRC, it was determined that this section should remain as it exists in the existing Technical Specifications.
- 161 The MINIMUM SHIFT MANNING CHART is being revised to require two NSOs when the units are in the following condition: One unit in cold shutdown, second unit in cold shutdown, and third unit above cold shutdown. This change will place Dresden in conformance with Federal Register Notice 48 FR 31611; Final Rule on Licensed Operator Staffing at Nuclear Power Plants (10 CFR 50.54). Additional clarifications on the definition of SCRE was added.
- 177 For Unit 2 only move Section 6.7 Environmental Qualification from page 177 to new page 183.
- For Unit 3 only remove the note on bottom of page which states (next page is 177b).
- 177b Change page number to 178. Section 6.6.B is being revised to require Reportable Occurrences to be reported following 10 CFR 50.73. This change is being made because of the issuance of NUREG-1022 LICENSEE EVENT REPORT SYSTEM which replaces NUREG-0161.
- 177c to 177e Deleted as they were part of Section 6.6.B.
- 177f Change page number to 179.
- 177g Change page number to 180.
- 178 Change page number to 181.
- 179 Change page number to 182.
- 180 Change page number to 183. (Unit 3 ONLY)

ATTACHMENT B

Evaluation of Significant Hazards Consideration

Description of Amendment Request

Changes to Section 6 of the Technical Specifications. These changes contain both revisions of our original submittal as requested by the NRC and conformance of the Technical Specifications to changes in the regulations.

Basis for Proposed No Significant Hazards Consideration (NSHC) Determination

The Commission has provided guidance concerning the application of specific standards for determining on whether a significant hazards consideration exists by provided certain examples. Two of these examples are applicable here. First the majority of the changes were to conform the Technical Specifications to recent changes to 10 CFR Part 50, Sections 50.54, 50.72 and 50.73. Clearly these changes fall within example (vii) "A change to make a license conform to changes in the regulations...." We consider the other changes merely administrative in nature which therefore fall within example (i).

Therefore, since the application for amendment involves a proposed change that is similar to examples for which no significant hazards consideration exists, Commonwealth Edison has made a proposed determination that the application involves no significant hazards consideration.

3.12 LIMITING CONDITIONS FOR OPERATION

3.12 FIRE PROTECTION SYSTEMS

Applicability:

Applies to the fire protection systems whenever the equipment or systems being protected are required to be operable.

Objective:

To ensure that adequate protection against fires is maintained during all modes of facility operation.

Specification:

A. Fire Detection Instrumentation

1. As a minimum, the fire detection instrumentation for each fire detection zone shown in Table 3.12-1 shall be operable at all times when equipment in that fire detection zone is required to be operable.
2. With the number of operable fire detection instruments less than required by Table 3.12-1;
 - a. Perform an inspection of the affected zone, if accessible, within 1 hour. Perform additional inspections at least once per hour, except in inaccessible areas.
 - b. Restore the inoperable instrument(s) to operable status within 14 days, or prepare and submit a report to the Commission pursuant to Specification 6.6.B within the next 30 days outlining the cause of the malfunction and the plans for restoring the instrument(s) to operable status.
 - c. The provisions of Specification 3.0.A are not applicable.

DPR-19 4.12 SURVEILLANCE REQUIREMENTS

4.12 FIRE PROTECTION SYSTEMS

Applicability:

Applies to the periodic testing requirements of the fire protection systems whenever the fire protection systems are required to be operable.

Objective:

To verify operability of the fire protection systems.

Specification:

A. Fire Detection Instrumentation

1. Each of the fire detection instruments given by Table 3.17-1 shall be demonstrated OPERABLE at least every 6 months by a channel functional test.

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3.12 LIMITING CONDITIONS FOR OPERATION**B. Fire Suppression Water System**

1. The Fire Suppression Water System shall be operable at all times with:
 - a. A flow path capable of taking suction from the 2/3 Intake Canal for Unit 2/3 Fire Pump.
 - b. A flow path capable of taking suction from the Unit 1 Intake Canal for Unit 1 fire pump.
 - c. The Unit 2/3 fire pump (2000 GPM) with its discharge aligned to the fire suppression header (from Unit 2/3 Intake Structure).
 - d. The Unit 1 fire pump (2000 GPM) with its discharge aligned to the fire suppression header (from Unit 1 Intake Structure).
 - e. Automatic initiation logic for each fire pump.
 - f. Fire suppression header piping with sectional control valves to:
 - 1) The yard loop.
 - 2) The front valve ahead of the water flow alarm device on each sprinkler or water spray system.
 - 3) The standpipe system.
2. With an inoperable fire pump or associated water supply, restore the inoperable equipment to operable status within 7 days, or prepare and submit a report to the Commission pursuant to Specification 6.6.B within the next 30 days outlining the plans and procedures to be used to provide for the loss of redundancy in this system.

4.12 SURVEILLANCE REQUIREMENTS**B. Fire Suppression Water System**

1. The Fire Suppression Water System shall be demonstrated operable:
 - a. At least once per 31 days by verifying valve positions.
 - b. At least once per 12 months by cycling each testable valve in the flow path through one complete cycle.
 - c. At least once per year by performance of a system flush.
 - d. At least once per operating cycle:
 - 1) By performing a system functional test which includes simulated automatic actuation of the system throughout its operating sequence and verifying that each automatic valve in the flow path actuates to its correct position.
 - 2) By verifying that the Unit 2/3 fire pump develops at least 2000 gpm at a system head of 238 feet.
 - 3) By verifying that the Unit 1 fire pump starts and develops at least 2000 gpm at a system head of 238 feet.
 - 4) Cycling each valve in the flow path that is not testable during plant operation through at least one complete cycle of full travel.
 - e. At least once per 3 years by performing flow tests of the system in accordance with the "Test of Water Supplies" Chapter in the NFPA Fire Protection Handbook.

3.12 LIMITING CONDITIONS FOR OPERATION**4.12 SURVEILLANCE REQUIREMENTS**

3. With no Fire Suppression Water System operable, within 24 hours;
 - a. Establish a backup Fire Suppression Water System.
 - b. Notify the Commission pursuant to Specification 6.6.B outlining the actions taken and the plans and schedule for restoring the system to operable status.

4. If the requirements of 3.12.B.J.a cannot be met, an orderly shutdown shall be initiated, and the reactor shall be in cold shutdown condition within 24 hours.

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3.12 LIMITING CONDITIONS FOR OPERATION

4.12 SURVEILLANCE REQUIREMENTS

C. Sprinkler Systems

1. The sprinkler systems given in Table 3.12-2 shall be operable at all times when equipment in the area that is sprinkler protected is required to be operable.
2. With a sprinkler system inoperable, establish fire inspections with backup fire suppression equipment within 1 hour.
 - a. In the Unit 2/3 turbine mezzanine 538' elevation area or Unit 2 hydrogen seal oil area, a continuous fire watch is to be established.
 - b. In all other areas given in Table 3.12-2 perform inspection hourly.
3. Restore the system to operable status within 14 days, or prepare and submit a report to the Commission pursuant to Specification 6.6.B within the next 30 days outlining the cause of inoperability, action taken and the plans for restoring the system to operable status.
4. The provisions of Specification 3.0.A are not applicable.

D. CO₂ System

1. The CO₂ Storage Tank shall have a minimum standby level of 50 percent and a minimum pressure of 250 psig.
2. The CO₂ System given in Table 3.12-3 shall be operable.

C. Sprinkler System

1. At least once per 31 days by verifying that each valve, manual, power-operated, or automatic, in the flow path is in its correct position.
2. At least once per 12 months by cycling each testable valve in the flow path through at least one complete cycle of full travel.
3. At least once per operating cycle:
 - a. A system functional test shall be performed which includes simulated automatic actuation of the system and verifying that the automatic valves in the flow path actuate to their correct positions.
 - b. The sprinkler headers shall be inspected to verify their integrity.
 - c. Each nozzle's spray area shall be inspected to verify no blockage of the spray pattern.
4. At least every other operating cycle, a flow test will be performed to verify that each open head spray nozzle is unobstructed.

D. CO₂ System

1. At least once per 7 days the CO₂ Storage Tank level and pressure will be verified.
2. At least once per 31 days by verifying that each valve, manual, power-operated, or automatic, in the flow path is in the correct position.
3. At least once per operating cycle, the system valves and associated dampers will be verified to actuate automatically and manually. A brief flow test shall be made to verify flow from each nozzle.

3.12 LIMITING CONDITIONS FOR OPERATION**4.12 SURVEILLANCE REQUIREMENTS**

3. Specifications 3.12.D.1 and 3.12.D.2 above apply when the equipment in the areas given in Table 3.12-J is required to be operable.
4. With a CO₂ System Inoperable, establish fire inspection with backup fire suppression equipment in unprotected areas within 1 hour, and perform inspection at least hourly.
5. Restore the system to operable status within 14 days, or prepare and submit a report to the Commission pursuant to Specification 6.6.B within the next 30 days outlining the cause of inoperability, action taken and the plans and schedule for restoring the system to operable status.
6. The provisions of Specification 3.0.A are not applicable.

E. Fire Hose Stations

1. The Fire Hose Stations given in Table 3.12-4 shall be operable at all times when the equipment in the area is required to be operable.
2. With a hose station inoperable route an additional equivalent capacity hose to the unprotected area from an operable hose station within 1 hour.
3. When a hose station becomes inoperable, restore to operable status within 14 days or report to the Commission pursuant to specification 6.6.B within the next 30 days outlining the cause of inoperability and plans for restoring the hose station to operability.
4. The provisions of Specification 3.0.A are not applicable.

E. Fire Hose Stations

1. At least once per 31 days, a visual inspection of each fire hose station shall be made to assure all equipment is available at the station.
2. At least once per operating cycle, the hose will be removed for inspection and repacked. Degraded gaskets in the couplings will be replaced.
3. At least once per 3 years, each hose station valve will be partially opened to verify valve operability and no blockage.
4. At least once per 3 years a hydrostatic test will be conducted on each hose at a pressure at least 50 psig above line pressure at that station.

3.12 LIMITING CONDITIONS FOR OPERATION**4.12 SURVEILLANCE REQUIREMENTS****F. Penetration Fire Barriers**

1. All penetration fire barriers (including fire doors and fire dampers) protecting safety related areas shall be intact, except as stated in specification 3.12.F.2 below.
2. With one or more of the required penetration fire barriers not intact, establish a continuous fire watch on at least one side of the affected penetration within 1 hour when the area on either side of the affected penetration contains equipment required to be operable.
3. The provisions of Specification 3.0.A are not applicable.
4. Restore the non-functional fire barrier penetrations to operable status within 7 days or prepare and submit a report to the Commission pursuant to Specification 6.6.B within the next 30 days outlining the cause of inoperability, action taken and the plans and schedule for restoring the penetration fire barriers to operable status.

C. See 3.12.B.

F. Penetration Fire Barriers

1. Each of the required penetration fire barriers shall be verified to be intact by a visual inspection:
 - a. At least once per 18 months, and
 - b. Prior to declaring a penetration fire barrier intact following repairs or maintenance.

G. Fire Pump Diesel Engine

1. The fire pump diesel engine shall be demonstrated OPERABLE:
 - a. At least once per 31 days by verifying:
 - 1) The fuel storage day tank contains at least 150 gallons of fuel, and
 - 2) The diesel starts for ambient conditions and operates for at least minutes.
 - 3) The fuel transfer pump starts and transfers fuel from the storage tank to the day tank.
 - b. At least once per 92 days a sample of diesel fuel shall be checked for viscosity, water and sediment. The procedure used shall be consistent with existing station procedures used to check diesel fuel in the main storage tanks.

6.0 ADMINISTRATIVE CONTROLS

6.1 Organization, Review, Investigation and Audit

- A. The Station Superintendent shall have overall full-time responsibility for safe operation of the facility. During periods when the Station Superintendent is unavailable, he shall designate this responsibility to an established alternate who satisfies the ANSI N18.1 of March 8, 1971 experience requirements for plant manager.
- B. The organization chart of the corporate management which relates to the operation of this station and the normal functional organization chart for operation of the station is shown in Figure 6.1.1.
- C. The shift manning for the station shall be as shown in Figure 6.1.2. The Operating Assistant Superintendent, Operating Engineer, Shift Engineers, and Shift Foreman shall have a senior operating license. The Fuel Handling Foreman has a limited Senior Operating License. The Division Vice President Nuclear Stations on the corporate level has responsibility for the Fire Protection Program. An Operating Engineer at the station will be responsible for implementation of the Fire Protection Program. A fire brigade of at least 5 members shall be maintained on-site at all times. This excludes the shift crew necessary for safe shutdown of the plant and any personnel required for essential functions during a fire emergency.
- D. Qualifications of the station management and operating staff shall meet minimum acceptable levels as described in ANSI N18.1, "Selection and Training of Nuclear Power Plant Personnel," dated March 8, 1971, with the exception of the Rad-Chem Supervisor who shall meet or exceed the qualifications of Radiation Protection Manager of Regulatory Guide 1.8, September,

1975, and the Shift Technical Advisor shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in plant design and response and analysis of the plant for transients and accidents. The individual filling the position of Administrative and Support Services Assistant Superintendent shall meet the minimum acceptable level for "Technical Manager" as described in 4.2.4 of ANSI N18.1-1971.

- E. Retraining and replacement training of Station personnel shall be in accordance with ANSI N18.1, "Selection and Training of Nuclear Power Plant Personnel," dated March 8, 1971.

A training program for the Fire Brigade shall be maintained under the direction of the Operating Engineer and shall meet or exceed the requirements of Section 27 of the NFPA Code-1975, except for Fire Brigade training sessions which shall be held at least quarterly.

- F. Retraining shall be conducted at intervals not exceeding two years.

- G. The Review and Investigative Function and the Audit Function of activities affecting quality during facility operations shall be constituted and have the responsibilities and authorities outlined below:

- 1. The Supervisor of the Offsite Review and Investigative Function shall be appointed by the Director of Nuclear Safety.

The Audit Function shall be the responsibility of the Manager of Quality Assurance and shall be independent of operations.

a. Offsite Review and Investigative Function

The Supervisor of the Offsite Review and Investigative Function shall:

Figure 6.1.2

MINIMUM SHIFT MANNING CHART (1)

UNITS WITH FUEL	CONDITION OF			NO. OF MEN IN EACH POSITION				
	FIRST UNIT	SECOND UNIT	THIRD UNIT	SRO (2)	RO (3)	STA or SCRE	NON-LIC.	RAD MEN
ONE	Cold Shutdown	Cold Shutdown	Cold Shutdown	1	1	0	5	1
	Cold Shutdown	Cold Shutdown	Above Cold Shutdown	2	2	1	5	1
TWO	Cold Shutdown	Cold Shutdown	Cold Shutdown	1	2	0	5	1
	Cold Shutdown	Cold Shutdown	Above Cold Shutdown	2	3	1	5	1
	Cold Shutdown	Above Cold Shutdown	Above Cold Shutdown	2	3	1	5	1
THREE	Cold Shutdown	Cold Shutdown	Cold Shutdown	1	3	0	5	1
	Cold Shutdown	Cold Shutdown	Above Cold Shutdown	2	4	1	5	1
	Cold Shutdown	Above Cold Shutdown	Above Cold Shutdown	2	4	1	5	1
	Above Cold Shutdown	Above Cold Shutdown	Above Cold Shutdown	2	4	1	5	1

SRO - Senior Reactor Operator. At least one SRO must remain in the Control Room at all times when one or more units is above cold shutdown. This person may, however, leave the Control Room for periods not to exceed 10 minutes, provided another SRO acts as relief operator. The SCRE or shift supervisor can fulfill this requirement.

RO - Reactor Operator (For each reactor containing fuel, one RO will be in the Control Room at all times.)

STA - Shift Technical Advisor.

SCRE - Station Control Room Engineer (STA with Senior Reactor Operators License).

NON-LIC. - Equipment Operators and Equipment Attendants.

RAD-MEN - Radiation Protection Men.

NOTES: (1) - Shift crew composition may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.

(2) - Does not include the licensed Senior Reactor Operator or Senior Reactor Operator limited to fuel handling, supervising CORE OPERATIONS.

(3) - Shall not operate units on which they are not licensed.

ADDITIONAL REQUIREMENTS

A. SRO can be RO at controls.

B. SRO in Control Room cannot provide relief to SRO/RO at controls.

C. SRO in Control Room must be in sight of or audible range of operator at all times or be in audible range of annunciators.

6.6 REPORTING REQUIREMENTS

In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following identified reports shall be submitted to the Director of the appropriate Regional Office of Inspection and Enforcement unless otherwise noted.

A. Routine Reports

1. Startup Report

A summary report of plant startup and power escalation testing shall be submitted following (1) receipt of an operating license, (2) amendment to the license involving a planned increase in power level, (3) installation of fuel that has a different design or has been manufactured by a different fuel supplier, and (4) modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the plant. The report shall address each of the tests identified in the FSAR and shall in general include a description of the measured values of the operating conditions or characteristics obtained during the test program and a comparison of these values with design predictions and specifications. Any corrective actions that were required to obtain satisfactory operation shall also be described. Any additional specific details required in license conditions based on other commitments shall be included in this report.

Startup reports shall be submitted within (1) 90 days following completion of the startup test program, (2) 90 days following resumption or commencement of commercial power operation, or (3) 9 months following initial criticality, whichever is earliest. If the Startup Report does not cover all three events (i.e., initial criticality, completion of startup test program, and resumption or commencement of commercial power operation), supplementary reports shall be submitted at least every three months until all three events have been completed.

2. A tabulation shall be submitted on an annual basis of the number of station, utility and other personnel (including contractors) receiving exposures greater than 100 mrem/yr and their associated man rem exposure according to work and job functions, 1/e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance (describe maintenance), waste processing, and refueling. The dose assignment to various duty functions may be estimates based on pocket dosimeter, TLD, or film badge measurements. Small exposures totalling less than 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources shall be assigned to specific major work functions.

3. Monthly Operating Report

Routine reports of operating statistics and shutdown experience shall be submitted on a monthly basis to the Director, Office of Management Information and Program Control, US Nuclear Regulatory Commission, Washington, DC 20555, with a copy to the appropriate Regional Office, to arrive no later than the 15th of each month following the calendar month covered by the report.

- B. Reportable Occurrences

Reportable occurrences will be submitted as required by 10CFR 50.73.

1/ This tabulation supplements the requirements of 20.407 of 10 CFR Part 20.

C. Unique Reporting Requirements

1. Radioactive Effluent Release Report

A report shall be submitted to the Commission within 60 days after January 1 and July 1 of each year specifying the quantity of each of the principal radionuclides released to unrestricted areas in liquid and gaseous effluents during the previous 6 months. The format and content of the report shall be in accordance with Regulatory Guide 1.21 (Revision 1) dated June 1974.

2. Environmental Radioactivity Data

a. Standard Radiological Monitoring Program

(1) Non-Routine Report

- (a) If a confirmed measured radionuclide concentration in an environmental sampling medium averaged over any calendar quarter sampling period exceeds the reporting level given in Table 4.8-1 and if the radioactivity is attributable to plant operation, a written report shall be submitted to the Director of the NRC Regional Office, with a copy to the Director, Office of Nuclear Reactor Regulation, within 30 days from the end of the quarter. When more than one of the radionuclides in Table 4.8-1 are detected in the medium, the reporting level shall have been exceeded if

$$\sum \frac{C_i}{R.L.i} \geq 1$$

where C is the concentration of the i^{th} radionuclide in the medium and RL is the reporting level of radionuclide i.

- (b) If radionuclides other than those in Table 4.8-1 are detected and are due to plant effluents, a reporting level is exceeded if the potential annual dose to an individual is equal to or greater than the design objective doses of 10 CFR 50, Appendix I.
- (c) This report shall include an evaluation of any release conditions, environmental factors, or other aspects necessary to explain the anomalous effect.

(2) Annual Operating Report

An annual report containing the data taken in the standard radiological monitoring program (Table 4.8-1) shall be submitted by March 31 of the next year. The content of the report shall include:

- (a) Results of environmental sampling summarized on a quarterly basis following the format of Regulatory Guide 4.8 Table 1 (December 1975); (Individual sample results will be retained at the station);
- (b) An assessment of the monitoring results and radiation dose via the principal pathways of exposure resulting from plant emissions of radioactivity; and
- (c) Results of the census to determine the locations of animals producing milk for human consumption.

b. Environmental Dose Pathways Studies (EDPS)

The EDPS schedule for Dresden Station is May 1978 through April 1979 with the project report submitted by December 31, 1979.

3. Special Reports

Special reports shall be submitted as indicated in Table 6.6.1.

**TABLE 6.6.1
SPECIAL REPORTS**

<u>AREA</u>	<u>SPECIFICATION REFERENCE</u>	<u>SUBMITTAL DATE</u>
a. Response time of safety related instruments (2)	1.0.E (Dres. 1)	Annual Report
b. Main stream isolation valve and feedwater power operated isolation valves closure times (2)	3.7.B.1.c (Dres. 1)	Annual Report
c. Primary Coolant leakage to Drywell (4)	4.6.D Bases	5 years (1)
d. In-Service Inspection Evaluation (4)	Table 4.6.1	5 years (1)
e. Evaluation of EGCS operation (4)	3.3.F Bases	Upon completion of initial testing
f. Failed Fuel Detection (4)	3.2 Bases	5 years (1)
g. Main Steam Line Leakage to Steam Tunnel (4)	4.6.D Bases	5 years (1)
h. In-service Inspection Development (4)	4.6.1 Bases	5 years (1)
i. In-Service Inspection of Sensitized Stainless Steel Components (3)	4.6.F	4 years (1)
j. Secondary Containment Leak Rate Test (4)	3.7.C.1	within 90 days after completion of each test
k. High off-gas discharge rate (2)	3.8.A.4 (Dresden 1)	within 24 hours of occurrence
l. Radioactive Source Leak Testing (5)	3.8.F	Annual Report

NOTES:

1. The report shall be submitted within the period of time listed based on the commercial service date as the starting point.
2. Dresden 1 only
3. Dresden 2 only
4. Dresden 2 and 3 only.
5. The report is required only if the tests reveal the presence of 0.005 micro-curies or more of removable contamination.

6.7 ENVIRONMENTAL QUALIFICATION

- A. By no later than June 30, 1982 all safety-related electrical equipment in the facility shall be qualified in accordance with the provisions of Division of Operating Reactors "Guidelines for Evaluating Environmental Qualification of Class IE Electrical Equipment in Operating Reactors" (DOR Guidelines); or, NUREG-0580 "Interim Staff Position on Environmental Qualification of Safety-Related Electrical Equipment", December 1979. Copies of these documents are attached to Order for Modification of License DPR-19 dated October 24, 1980.
- B. By no later than December 1, 1980, complete and auditable records must be available and maintained at a central location which describe the environmental qualification method used for all safety-related electrical equipment in sufficient detail to document the degree of compliance with the DOR Guidelines or NUREG-0580. Thereafter, such records should be updated and maintained current as equipment is replaced, further tested, or otherwise further qualified.

3.12 LIMITING CONDITIONS FOR OPERATION

3.12 FIRE PROTECTION SYSTEMS

Applicability:

Applies to the fire protection systems whenever the equipment or systems being protected are required to be operable.

Objective:

To ensure that adequate protection against fires is maintained during all modes of facility operation.

Specification:

A. Fire Detection Instrumentation

1. As a minimum, the fire detection instrumentation for each fire detection zone shown in Table 3.12-1 shall be operable at all times when equipment in that fire detection zone is required to be operable.
2. With the number of operable fire detection instruments less than required by Table 3.12-1:
 - a. Perform an inspection of the affected zone, if accessible, within 1 hour. Perform additional inspections at least once per hour, except in inaccessible areas.
 - b. Restore the inoperable instrument(s) to operable status within 14 days, or prepare and submit a report to the Commission pursuant to Specification 6.6.B within the next 30 days outlining the cause of the malfunction and the plans for restoring the instrument(s) to operable status.
 - c. The provisions of Specification 3.0.A are not applicable.

DPR-25' 4.12 SURVEILLANCE REQUIREMENTS

4.12 FIRE PROTECTION SYSTEMS

Applicability:

Applies to the periodic testing requirements of the fire protection systems whenever the fire protection systems are required to be operable.

Objective:

To verify operability of the fire protection systems.

Specification:

A. Fire Detection Instrumentation

1. Each of the fire detection instruments given by Table 3.12-1 shall be demonstrated OPERABLE at least every 6 months by a channel functional test.

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3.12 LIMITING CONDITIONS FOR OPERATION**B. Fire Suppression Water System**

1. The Fire Suppression Water System shall be operable at all times with:
 - a. A flow path capable of taking suction from the 2/3 Intake Canal for Unit 2/3 Fire Pump.
 - b. A flow path capable of taking suction from the Unit 1 Intake Canal for Unit 1 fire pump.
 - c. The Unit 2/3 fire pump (2000 GPM) with its discharge aligned to the fire suppression header (from Unit 2/3 Intake Structure).
 - d. The Unit 1 fire pump (2000 GPM) with its discharge aligned to the fire suppression header (from Unit 1 Intake Structure).
 - e. Automatic initiation logic for each fire pump.
 - f. Fire suppression header piping with sectional control valves to:
 - 1) The yard loop.
 - 2) The front valve ahead of the water flow alarm device on each sprinkler or water spray system.
 - 3) The standpipe system.
2. With an inoperable fire pump or associated water supply, restore the inoperable equipment to operable status within 7 days, or prepare and submit a report to the Commission pursuant to Specification 6.6.B within the next 30 days outlining the plans and procedures to be used to provide for the loss of redundancy in this system.

4.12 SURVEILLANCE REQUIREMENTS**B. Fire Suppression Water System**

1. The Fire Suppression Water System shall be demonstrated operable:
 - a. At least once per 31 days by verifying valve positions.
 - b. At least once per 12 months by cycling each testable valve in the flow path through one complete cycle.
 - c. At least once per year by performance of a system flush.
 - d. At least once per operating cycle:
 - 1) By performing a system functional test which includes simulated automatic actuation of the system throughout its operating sequence and verifying that each automatic valve in the flow path actuates to its correct position.
 - 2) By verifying that the Unit 2/3 fire pump develops at least 2000 gpm at a system head of 238 feet.
 - 3) By verifying that the Unit 1 fire pump starts and develops at least 2000 gpm at a system head of 238 ft.
 - 4) Cycling each valve in the flow path that is not testable during plant operation through at least one complete cycle of full travel.
 - e. At least once per 3 years by performing flow tests of the system in accordance with the "Test of Water Supplies" Chapter in the NFPA Fire Protection Handbook.

3.12 LIMITING CONDITIONS FOR OPERATION**4.12 SURVEILLANCE REQUIREMENTS**

3. With no Fire Suppression Water System operable, within 24 hours;
 - a. Establish a backup Fire Suppression Water System.
 - b. Notify the Commission pursuant to Specification 6.6.B outlining the actions taken and the plans and schedule for restoring the system to operable status.

4. If the requirements of 3.12.B.J.a cannot be met, an orderly shutdown shall be initiated, and the reactor shall be in cold shutdown condition within 24 hours.

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3.12 LIMITING CONDITIONS FOR OPERATION**C. Sprinkler Systems**

1. The sprinkler systems given in Table 3.12-2 shall be operable at all times when equipment in the area that is sprinkler protected is required to be operable.
2. With a sprinkler system inoperable, establish fire inspections with backup fire suppression equipment within 1 hour.
 - a. In the Unit 2/3 turbine mezzanine 538' elevation area or Unit 3 hydrogen seal oil area, a continuous fire watch is to be established.
 - b. In all other areas given in Table 3.12-2 perform surveillance hourly.
3. Restore the system to operable status within 14 days, or prepare and submit a report to the Commission pursuant to Specification 6.6.8 within the next 30 days outlining the cause of inoperability, action taken and the plans for restoring the system to operable status.
4. The provisions of Specification 3.0.A are not applicable.

D. CO₂ System

1. The CO₂ Storage Tank shall have a minimum standby level of 50 percent and a minimum pressure of 250 psig.
2. The CO₂ System given in Table 3.12-3 shall be operable.

4.12 SURVEILLANCE REQUIREMENTS**C. Sprinkler System**

1. At least once per 31 days by verifying that each valve, manual, power-operated, or automatic, in the flow path is in its correct position.
2. At least once per 12 months by cycling each testable valve in the flow path through at least one complete cycle of full travel.
3. At least once per operating cycle:
 - a. A system functional test shall be performed which includes simulated automatic actuation of the system and verifying that the automatic valves in the flow path actuate to their correct positions.
 - b. The sprinkler headers shall be inspected to verify their integrity.
 - c. Each nozzle shall be inspected to verify no blockage.
4. At least every other operating cycle, a flow test will be performed to verify that each open head spray nozzle is unobstructed.

D. DO₂ System

1. At least once per 7 days the CO₂ Storage Tank level and pressure will be verified.
2. At least once per 31 days by verifying that each valve, manual, power-operated, or automatic, in the flow path is in the correct position.
3. At least once per operating cycle, the system valves and associated dampers will be verified to actuate automatically and manually. A brief flow test shall be made to verify flow from each nozzle.

3.12 LIMITING CONDITIONS FOR OPERATION

3. Specifications 3.12.D.1 and 3.12.D.2 above apply when the equipment in the areas given in Table 3.12-3 is required to be operable.
4. With a CO₂ System Inoperable, establish fire inspection with backup fire suppression equipment in unprotected areas within 1 hour, and perform inspection at least hourly.
5. Restore the system to operable status within 14 days, or prepare and submit a report to the Commission pursuant to Specification 6.6.8 within the next 30 days outlining the cause of inoperability, action taken and the plans and schedule for restoring the system to operable status.
6. The provisions of Specification 3.0.A are not applicable.

E. Fire Hose Stations

1. The Fire Hose Stations given in Table 3.12-4 shall be operable at all times when the equipment in the area is required to be operable.
2. With a hose station inoperable route an additional equivalent capacity hose to the unprotected area from an operable hose station within 1-hour.
3. When a hose station becomes inoperable, restore to operable status within 14 days or report to the Commission pursuant to specification 6.6.8 within the next 30 days outlining the cause of inoperability and plans for restoring the hose station to operability.
4. The provisions of Specification 3.0.A are not applicable.

4.12 SURVEILLANCE REQUIREMENTS**E. Fire Hose Stations**

1. At least once per 31 days, a visual inspection of each fire hose station shall be made to assure all equipment is available at the station.
2. At least once per operating cycle, the hose will be removed for inspection and repacked. Degraded gaskets in the couplings will be replaced.
3. At least once per 3 years, each hose station valve will be partially opened to verify valve operability and no blockage.
4. At least once per 3 years a hydrostatic test will be conducted on each hose at a pressure at least 50 psig above line pressure at that station.

3.12 LIMITING CONDITIONS FOR OPERATION

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4.12 SURVEILLANCE REQUIREMENTS

F. Penetration Fire Barriers

1. All penetration fire barriers (including fire doors and fire dampers) protecting safety related areas shall be intact, except as stated in specification 3.12.F.2 below.
2. With one or more of the required penetration fire barriers not intact, establish a continuous fire watch on at least one side of the affected penetration within 1 hour when the area on either side of the affected penetration contains equipment required to be operable.
3. The provisions of Specification 3.0.A are not applicable.
4. Restore the non-functional fire barrier penetrations to operable status within 7 days or prepare and submit a report to the Commission pursuant to Specification 6.6.B within the next 30 days outlining the cause of inoperability, action taken and the plans and schedule for restoring the penetration fire barriers to operable status.

G. See 3.12.B.

F. Penetration Fire Barriers

1. Each of the required penetration fire barriers shall be verified to be intact by a visual inspection:
 - a. At least once per 18 months, and
 - b. Prior to declaring a penetration fire barrier intact following repairs or maintenance.

G. Fire Pump Diesel Engine

1. The fire pump diesel engine shall be demonstrated OPERABLE:
 - a. At least once per 31 days by verifying:
 - 1) The fuel storage day tank contains at least 150 gallons of fuel, and
 - 2) The diesel starts for ambient conditions and operates for at least 30 minutes.
 - 3) The fuel transfer pump starts and transfers fuel from the storage tank to the day tank.
 - b. At least once per 92 days a sample of diesel fuel shall be checked for viscosity, water and sediment. The procedure used shall be consistent with existing station procedures used to check diesel fuel in the main storage tanks.

6.0 ADMINISTRATIVE CONTROLS

6.1 Organization, Review, Investigation and Audit

- A. The Station Superintendent shall have overall full-time responsibility for safe operation of the facility. During periods when the Station Superintendent is unavailable, he shall designate this responsibility to an established alternate who satisfies the ANSI N18.1 of March 8, 1971 experience requirements for plant manager.
- B. The organization chart of the corporate management which relates to the operation of this station and the normal functional organization chart for operation of the station is shown in Figure 6.1.1.
- C. The shift manning for the station shall be as shown in Figure 6.1.2. The Operating Assistant Superintendent, Operating Engineer, Shift Engineers, and Shift Foreman shall have a senior operating license. The Fuel Handling Foreman has a limited Senior Operating License. The Division Vice President Nuclear Stations on the corporate level has responsibility for the Fire Protection Program. An Operating Engineer at the station will be responsible for implementation of the Fire Protection Program. A fire brigade of at least 5 members shall be maintained on-site at all times. This excludes the shift crew necessary for safe shutdown of the plant and any personnel required for essential functions during a fire emergency.
- D. Qualifications of the station management and operating staff shall meet minimum acceptable levels as described in ANSI N18.1, "Selection and Training of Nuclear Power Plant Personnel," dated March 8, 1971, with the exception of the Rad-Chem Supervisor who shall meet or exceed the qualifications of Radiation Protection Manager of Regulatory Guide 1.8, September,

1975, and the Shift Technical Advisor shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in plant design and response and analysis of the plant for transients and accidents. The individual filling the position of Administrative and Support Services Assistant Superintendent shall meet the minimum acceptable level for "Technical Manager" as described in 4.2.4 of ANSI N18.1-1971.

- E. Retraining and replacement training of Station personnel shall be in accordance with ANSI N18.1, "Selection and Training of Nuclear Power Plant Personnel," dated March 8, 1971.

A training program for the Fire Brigade shall be maintained under the direction of the Operating Engineer and shall meet or exceed the requirements of Section 27 of the NFPA Code-1975, except for Fire Brigade training sessions which shall be held at least quarterly.

- F. Retraining shall be conducted at intervals not exceeding two years.

G/ The Review and Investigative Function and the Audit Function of activities affecting quality during facility operations shall be constituted and have the responsibilities and authorities outlined below:

1. The Supervisor of the Offsite Review and Investigative Function shall be appointed by the Director of Nuclear Safety.

The Audit Function shall be the responsibility of the Manager of Quality Assurance and shall be independent of operations.

a. Offsite Review and Investigative Function

The Supervisor of the Offsite Review and Investigative Function shall:

Figure 6.1.2

MINIMUM SHIFT MANNING CHART (1)

UNITS WITH FUEL	CONDITION OF			NO. OF MEN IN EACH POSITION				
	FIRST UNIT	SECOND UNIT	THIRD UNIT	SRO (2)	RO (3)	STA or SCRE	NON-LIC.	RAD MEN
ONE	Cold Shutdown	Cold Shutdown	Cold Shutdown	1	1	0	5	1
	Cold Shutdown	Cold Shutdown	Above Cold Shutdown	2	2	1	5	1
TWO	Cold Shutdown	Cold Shutdown	Cold Shutdown	1	2	0	5	1
	Cold Shutdown	Cold Shutdown	Above Cold Shutdown	2	3	1	5	1
	Cold Shutdown	Above Cold Shutdown	Above Cold Shutdown	2	3	1	5	1
THREE	Cold Shutdown	Cold Shutdown	Cold Shutdown	1	3	0	5	1
	Cold Shutdown	Cold Shutdown	Above Cold Shutdown	2	4	1	5	1
	Cold Shutdown	Above Cold Shutdown	Above Cold Shutdown	2	4	1	5	1
	Above Cold Shutdown	Above Cold Shutdown	Above Cold Shutdown	2	4	1	5	1

SRO - Senior Reactor Operator. At least one SRO must remain in the Control Room at all times when one or more units is above cold shutdown. This person may, however, leave the Control Room for periods not to exceed 10 minutes, provided another SRO acts as relief operator. The SCRE or shift supervisor can fulfill this requirement.

RO - Reactor Operator (For each reactor containing fuel, one RO will be in the Control Room at all times.)

STA - Shift Technical Advisor.

SCRE - Station Control Room Engineer (STA with Senior Reactor Operators License).

NON-LIC. - Equipment Operators and Equipment Attendants.

RAD-MEN - Radiation Protection Men

- NOTES:**
- (1) - Shift crew composition may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements.
 - (2) - Does not include the licensed Senior Reactor Operator or Senior Reactor Operator limited to fuel handling, supervising CORE OPERATIONS.
 - (3) - Shall not operate units on which they are not licensed.

ADDITIONAL REQUIREMENTS

- A. SRO can be RO at controls.
- B. SRO in Control Room cannot provide relief to SRO/RO at controls.
- C. SRO in Control Room must be in sight of or audible range of operator at all times or be in audible range of annunciators.

6.6 REPORTING REQUIREMENTS

In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following identified reports shall be submitted to the Director of the appropriate Regional Office of Inspection and Enforcement unless otherwise noted.

A. Routine Reports

1. Startup Report

A summary report of plant startup and power escalation testing shall be submitted following (1) receipt of an operating license, (2) amendment to the license involving a planned increase in power level, (3) installation of fuel that has a different design or has been manufactured by a different fuel supplier, and (4) modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the plant. The report shall address each of the tests identified in the FSAR and shall in general include a description of the measured values of the operating conditions or characteristics obtained during the test program and a comparison of these values with design predictions and specifications. Any corrective actions that were required to obtain satisfactory operation shall also be described. Any additional specific details required in license conditions based on other commitments shall be included in this report.

Startup reports shall be submitted within (1) 90 days following completion of the startup test program, (2) 90 days following resumption or commencement of commercial power operation, or (3) 9 months following initial criticality, whichever is earliest. If the Startup Report does not cover all three events (i.e., initial criticality, completion of startup test program, and resumption or commencement of commercial power operation), supplementary reports shall be submitted at least every three months until all three events have been completed.

2. A tabulation shall be submitted on an annual basis of the number of station, utility and other personnel (including contractors) receiving exposures greater than 100 mrem/yr and their associated man rem exposure according to work and job functions, i/e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance (describe maintenance), waste processing, and refueling. The dose assignment to various duty functions may be estimates based on pocket dosimeter, TLD, or film badge measurements. Small exposures totalling less than 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources shall be assigned to specific major work functions.

3. Monthly Operating Report

Routine reports of operating statistics and shutdown experience shall be submitted on a monthly basis to the Director, Office of Management Information and Program Control, US Nuclear Regulatory Commission, Washington, DC 20555, with a copy to the appropriate Regional Office, to arrive no later than the 15th of each month following the calendar month covered by the report.

B. Reportable Occurrences

Reportable occurrences will be submitted as required by 10CFR 50.73.

1/ This tabulation supplements the requirements of 20.407 of 10 CFR Part 20.

C. Unique Reporting Requirements

1. Radioactive Effluent Release Report

A report shall be submitted to the Commission within 60 days after January 1 and July 1 of each year specifying the quantity of each of the principal radionuclides released to unrestricted areas in liquid and gaseous effluents during the previous 6 months. The format and content of the report shall be in accordance with Regulatory Guide 1.21 (Revision 1) dated June 1974.

2. Environmental Radioactivity Data

a. Standard Radiological Monitoring Program

(1) Non-Routine Report

- (a) If a confirmed measured radionuclide concentration in an environmental sampling medium averaged over any calendar quarter sampling period exceeds the reporting level given in Table 4.8-1 and if the radioactivity is attributable to plant operation, a written report shall be submitted to the Director of the NRC Regional Office, with a copy to the Director, Office of Nuclear Reactor Regulation, within 30 days from the end of the quarter. When more than one of the radionuclides in Table 4.8-1 are detected in the medium, the reporting level shall have been exceeded if

$$\sum \frac{C_i}{R.L.i} \geq 1$$

where C is the concentration of the i^{th} radionuclide in the medium and RL is the reporting level of radionuclide i.

- (b) If radionuclides other than those in Table 4.8-1 are detected and are due to plant effluents, a reporting level is exceeded if the potential annual dose to an individual is equal to or greater than the design objective doses of 10 CFR 50, Appendix I.
- (c) This report shall include an evaluation of any release conditions, environmental factors, or other aspects necessary to explain the anomalous effect.

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(2) Annual Operating Report

An annual report containing the data taken in the standard radiological monitoring program (Table 4.8-1) shall be submitted by March 31 of the next year. The content of the report shall include:

- (a) Results of environmental sampling summarized on a quarterly basis following the format of Regulatory Guide 4.8 Table 1 (December 1975); (Individual sample results will be retained at the station);
- (b) An assessment of the monitoring results and radiation dose via the principal pathways of exposure resulting from plant emissions of radioactivity; and
- (c) Results of the census to determine the locations of animals producing milk for human consumption.

b. Environmental Dose Pathways Studies (EDPS)

The EDPS schedule for Dresden Station is May 1978 through April 1979 with the project report submitted by December 31, 1979.

3. Special Reports

Special reports shall be submitted as indicated in Table 6.6.1.

**TABLE 6.6.1
SPECIAL REPORTS**

<u>AREA</u>	<u>SPECIFICATION REFERENCE</u>	<u>SUBMITTAL DATE</u>
a. Response time of safety related instruments (2)	1.0.E (Dres. 1)	Annual Report
b. Main stream isolation valve and feedwater power operated isolation valves closure times (2)	3.7.B.1.c (Dres. 1)	Annual Report
c. Primary Coolant leakage to Drywell (4)	4.6.D Bases	5 years (1)
d. In-Service Inspection Evaluation (4)	Table 4.6.1	5 years (1)
e. Evaluation of EGCS operation (4)	3.3.F Bases	Upon completion of initial testing
f. Failed Fuel Detection (4)	3.2 Bases	5 years (1)
g. Main Steam Line Leakage to Steam Tunnel (4)	4.6.D Bases	5 years (1)
h. In-service Inspection Development (4)	4.6.1 Bases	5 years (1)
i. In-Service Inspection of Sensitized Stainless Steel Components (3)	4.6.F	4 years (1)
j. Secondary Containment Leak Rate Test (4)	3.7.C.1	within 90 days after completion of each test
k. High off-gas discharge rate (2)	3.8.A.4 (Dresden 1)	within 24 hours of occurrence
l. Radioactive Source Leak Testing (5)	3.8.F	Annual Report

NOTES:

1. The report shall be submitted within the period of time listed based on the commercial service date as the starting point.
2. Dresden 1 only
3. Dresden 2 only
4. Dresden 2 and 3 only.
5. The report is required only if the tests reveal the presence of 0.005 micro-curies or more of removable contamination.

6.7 ENVIRONMENTAL QUALIFICATION

- A. By no later than June 30, 1982 all safety-related electrical equipment in the facility shall be qualified in accordance with the provisions of Division of Operating Reactors "Guidelines for Evaluating Environmental Qualification of Class IE Electrical Equipment in Operating Reactors" (DOR Guidelines); or, NUREG-0588 "Interim Staff Position on Environmental Qualification of Safety-Related Electrical Equipment", December 1979. Copies of these documents are attached to Order for Modification of License DPR-25 dated October 24, 1980.
- B. By no later than December 1, 1980, complete and auditable records must be available and maintained at a central location which describe the environmental qualification method used for all safety-related electrical equipment in sufficient detail to document the degree of compliance with the DOR Guidelines or NUREG-0588. Thereafter, such records should be updated and maintained current as equipment is replaced, further tested, or otherwise further qualified.