



Public Service

Public Service
Company of Colorado
P.O. Box 840
Denver CO 80201-0840

May 17, 1991
Fort St. Vrain
Unit No. 1
P-91174

A. Clegg Crawford
Vice President
Nuclear Operations

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Docket No. 50-267

SUBJECT: REVISIONS TO FPOR-0, FPOR-13, FPOR-14, AND FPOR-15

REFERENCE: PSC Letter, Crawford to USNRC, dated July 20, 1990
(P-90230)

Gentlemen:

Enclosed is one original and ten additional copies of each of the following Fire Protection Operability Requirements (FPORs) and the revised Table of Contents (TOC):

FPOR-0, Issue 3 - FIRE PROTECTION OPERABILITY
FPOR-13, Issue 6 - FIRE BARRIERS
FPOR-14, Issue 6 - FIRE DOORS
FPOR-15, Issue 4 - FIRE DAMPERS
TABLE OF CONTENTS, Issue 14

The TOC and FPORs should be inserted as replacement pages in Section FP.6.1 of the Fort St. Vrain (FSV) Fire Protection Program Plan, Revision 4 which was submitted to the NRC in the referenced letter. FP.6.1, Attachment 21 should be removed from the FPPP since it has been incorporated into FPOR-0. These FPOR revisions are being transmitted in accordance with the requirements of 10 CFR 50.71(e).

FPOR-0 is the introductory procedure for the FPORs. This procedure defines the operability requirements for Fire Protection and Cooldown Train Systems, required actions for inoperable systems, and surveillance requirements.

FPOR-13, Fire Barriers, ensures that certain penetration seals and associated fire barriers listed in Table FPOR-13-1 are operable. The seals and barriers minimize the possibility of a single fire involving more than one fire area prior to detection and extinguishment.

FPOR-14, Fire Doors, ensures that certain fire doors in Table FPOR-14-1 are operable. The fire doors perform the same basic functions as fire barriers.

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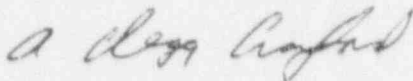
FPOR-15, Fire Dampers, ensures that certain fire dampers in Table FPOR-15-1 are operable. The fire dampers perform the same basic functions as fire barriers and fire doors.

The attachment to this letter is a summary of the changes to each of the four FPORs.

A 10 CFR 50.59 safety evaluation was performed on each of the FPORs listed above. The evaluations determined that the revisions were not safety related or safety significant, and did not involve or create an unreviewed safety question. The revisions do not require changes to the FSV Technical Specifications.

If you have any questions or comments, please contact Mr. M. H. Holmes at (303) 480-6960.

Very truly yours,



A. Clegg Crawford
Vice President
Nuclear Operations

ACC/DLF/lmb

Attachment

Enclosures

cc: Regional Administrator, Region IV

Mr. J. B. Baird
Senior Resident Inspector
Fort St. Vrain
(Enclosures previously delivered)

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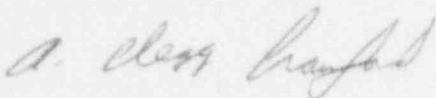
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Fort St. Vrain
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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of the Fire Protection)
Program Plan of)
Public Service Company of Colorado)
Fort St. Vrain) Docket No. 50-267

AFFIDAVIT

A. Clegg Crawford being first duly sworn, deposes and says: That he is Vice President, Nuclear Operations, of Public Service Company of Colorado, the Licensee herein, that he has read the information presented in the attached letter and knows the contents thereof, and that the statements and matters set forth therein are true and correct to the best of his knowledge, information and belief.

A. Clegg Crawford

A. Clegg Crawford
Vice President
Nuclear Operations

STATE OF COLORADO)
)
COUNTY OF DENVER)

Subscribe and sworn to before me, a Notary Public on this 17th day
of May, 1991.

Delores Romero
Notary Public

My commission expires January 6, 1993.

ATTACHMENT TO

P-91174

SUMMARY OF CHANGES

FPOR-0
FPOR-13
FPOR-14
FPOR-15

SUMMARY OF CHANGES
PAGE 1 OF 2

FPOR-0

Changed the procedure number from FP.6.1 to FPOR-0.

General procedure updates to indicate correct Fire Protection Trains' name, deletion of the ACM as a cooldown train, added two new references, and revised the Attachment List.

General updates of Section 4.5, Surveillance Requirements.

Editorial changes/corrections throughout the procedure.

Deleted the weekly Impairment Log review by the Fire Protection Engineer and incorporated the Log into FPOR-0 as Attachment 1.

FPOR-13

Added a footnote to the FPOR to indicate which SURVEILLANCE REQUIREMENT is not applicable to seals maintained as Halon barriers only.

Revised the BASIS for FPOR-13 to indicate the Fire Area Redefinition based on EE-FP-024, Rev. A.

Asterisked appropriate seals in Table FPOR-13-1 based on EE-FP-024, Rev. A, and accompanying Safety Evaluation. Also added a note to explain the asterisked seals.

Changed the Records Center seal designation from "IRS" to "1RS" for consistency with design documents.

SUMMARY OF CHANGES

PAGE 2 OF 2

FPOR-14

Added a footnote to the FPOR to indicate which SURVEILLANCE REQUIREMENT is not applicable to doors maintained as Halon barriers only.

Revised the BASIS for FPOR-14 to indicate the Fire Area Redefinition based on EE-FP-024, Rev. A.

Certain doors in Table FPOR-14-1 are asterisked to indicate they are no longer fire doors and will be maintained as Halon barriers only. Also added a note to explain the asterisked doors.

FPOR-15

Placed the BASIS for FPOR-15 all on one page and revised the BASIS to indicate the Fire Area Redefinition based on EE-FP-024, Rev. A.

Deleted certain fire dampers from Table FPOR-15-1 based on EE-FP-024, Rev. A, and the accompanying Safety Evaluation.

Asterisked certain fire dampers in Table FPOR-15-1 to indicate they are no longer fire dampers and will be maintained as Halon barriers only.

Deleted the two dampers associated with the Hydrogen Bottle Storage Room since hydrogen is no longer stored there.

ENCLOSURES TO

P-91174

TABLE OF CONTENTS

FPOR-0
FPOR-13
FPOR-14
FPOR-15

SECTION FP.6.1
FIRE PROTECTION OPERABILITY REQUIREMENTS
TABLE OF CONTENTS

<u>NUMBER</u>	<u>TITLE</u>	<u>ISSUE</u>	<u>EFFECTIVE DATE</u>
FPOR-0	Fire Protection Operability	3	05-08-91
FPOR-1	Emergency Diesel Generator Carbon Dioxide System	2	05-04-88
FPOR-2	Carbon Dioxide Hose Reels	2	05-04-88
FPOR-3	Halon Systems	3	01-10-90
FPOR-4	Deluge Spray Systems	2	05-04-88
FPOR-5	Fixed Water Spray Systems	2	05-04-88
FPOR-6	Plant Yard Hydrants	2	05-04-88
FPOR-7	Fire Extinguishers	2	05-04-88
FPOR-8	Breathing Air System	2	05-04-88
FPOR-9	Fire Hose Stations	2	05-04-88
FPOR-10	Fire Water Pumps	2	05-04-88
FPOR-11	Fire Water Headers and Mains	2	05-04-88
FPOR-12	Fire Detectors	5	12-19-90
FPOR-13	Fire Barriers	6	05-08-91
FPOR-14	Fire Doors	6	05-08-91
FPOR-15	Fire Dampers	4	05-08-91
FPOR-16	Fire Protection Cooldown Trains	4	04-27-90
FPOR-17	Alternate Cooling Method (ACM) - DELETED	4	04-27-90
FPOR-18	Ladders	3	04-27-90
FPOR-19	Cable Wraps	2	05-04-88
FPOR-20	Emergency Lighting	2	05-04-88
FPOR-21	Site Fire Brigade	1	01-16-90



FIRE PROTECTION OPERABILITY

RESPONSIBLE FOR:	<i>Michael D. Bird</i>	AUTHORIZED BY:	<i>St. Fuller</i>		
AUTHORIZED BY:					
PORC REVIEW	PORC 933 MAY 8 - 1991			EFFECTIVE DATE	5-9-91
DCCF NUMBER (S)					

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1.0 PURPOSE

This procedure defines the operability requirements for Fire Protection and Cooldown Train Systems, required actions for inoperable systems, and surveillance requirements.

2.0 APPLICABILITY

This procedure applies to all Fire Protection and Cooldown Train Systems, i.e.:

- (1) Detection,
- (2) Suppression, and
- (3) Fire Protection Cooldown Trains.

3.0 GENERAL REQUIREMENTS

3.1 Responsibility

3.1.1 Superintendent of Operations

The Superintendent of Operations is responsible for implementation of this procedure.

3.1.2 Shift Supervisor

The Shift Supervisor (SS) is responsible for the operation of these Fire Protection Systems per this procedure.

The SS is responsible to ensure adequate measures are taken to compensate for inoperable cooldown trains, fire protection systems, or components in accordance with this procedure.

The SS is responsible for reporting impairments of Fire Protection Systems per Section 4.4 of this procedure.

The SS may designate a knowledgeable individual to aid him in determining operability and required actions on inoperability for these Fire Protection Systems. The Declaration of Operability for a system/component can be determined by a review of all outstanding documentation for this system/component. The review must consider the impact of any open work on the system. Prior to declaring a system/component operable, the review should include the following:

- a. Current valve and electrical lineups, including independent verification if required. (Deviations from the valve and electrical lineups are acceptable as long as they do not preclude the system's ability to perform its specified function).
- b. Outstanding clearances.
- c. Outstanding SSRs.
- d. Outstanding CWP's or CWIs.
- e. Outstanding TCRs for operational impact.
- f. All required surveillances for completion.

A system/component is not operable unless the system/component is able to perform its specified function(s).

3.1.3 Fire Protection Engineer

The Fire Protection Engineer (FPE) or the designated alternate is responsible to provide engineering assistance for determination of system/component operability and determination of equivalent fire suppression equipment for inoperable systems/components.

The evaluations to determine fire watch frequency performed by the FPE or the designated alternate shall include a review of detection and required equipment located in the area.

3.2 Definitions

3.2.1 Operable

A Fire Protection System, subsystem, component, or device shall be considered operable when it is capable of performing its specified function(s). All necessary attendant instrumentation, controls, electrical power, ventilation, lubrication, fuel, or other auxiliary equipment required for the system, subsystem, component, or device to perform its specified function(s) must also be capable of performing their related support function(s).

3.2.2 Functional Test

The functional test shall be the actual functioning of the trains/components to verify operability including alarms and/or trip functions. In cases where the actual functioning of the components is not possible, a test signal shall be introduced for this purpose. The functional test may be performed by any series of sequential or overlapping steps such that the entire system or component is tested.

3.2.3 Continuous Fire Watch

Action shall be taken to establish these watches within 1 hour after the determination that they are required. The area(s) shall be checked at least once per 20 minutes. In areas which are continuously occupied, those individuals may serve as the fire watch for that area.

3.2.4 Hourly Fire Watch Patrol

Action shall be taken to establish these watches within 1 hour after the determination that they are required. The area(s) shall be checked at least once per hour.

3.2.5 Equivalent Fire Suppression Equipment

When actions require the establishment of equivalent backup fire suppression equipment, the adequacy of this backup equipment shall be determined and documented by the Fire Protection Engineer or his designated alternate. This backup shall be established as required in the applicable FPOR, or as soon as practicable.

3.2.6 Designated Alternate

The qualifications of the FPE's designated alternate shall be determined by the FPE on a case by case basis. The alternate's qualification requirements shall, as a minimum, include special training as outlined by the FPE. The FPE will document the training received by the designated alternate and the FPE's statement that the designated alternate successfully completed the training prior to undertaking any FPE actions.

4.0 PROCEDURE

4.1 Introduction

The purpose of this procedure is to identify what constitutes operable Fire Protection Systems or components, the actions required for an inoperable or impaired Fire Protection System or component, and, as a minimum, the types of periodic tests required to be performed on each system or component. This is accomplished by defining when a Fire Protection System must be operable, criteria which can be used to evaluate the operability of the system (i.e., periodic test requirements) and the actions that must occur to ensure adequate fire protection measures have been taken to maintain fire safe conditions.

4.2 Inoperability

4.2.1 Whenever a Fire Protection System is potentially inoperable this procedure provides interim actions to compensate for the inoperable system.

4.2.2 The first step is to determine whether the system is inoperable. When the determination of operability is unclear, queries should be directed to the Fire Protection Engineer or his designated alternate.

4.3 Fire Protection Operability Requirements and Corrective Actions

4.3.1 Fire Protection Operability Requirements (FPORs) state the operability requirements and the required actions for inoperable Fire Protection Systems, or components.

4.3.2 When implemented, the FPOR actions give an equivalent degree of protection to the area covered by the Inoperable Fire Protection System.

4.3.3 Augmentation of these actions is authorized by the SS and noted in the Fire Protection Impairment Log.

4.3.4 In cases where a system is operable but impaired, i.e., a known deficiency exists, the FPOR action requirements may be implemented as a precautionary measure.

4.3.5 Inoperable or impaired Fire Protection Systems or components shall be considered an impairment and noted per Section 4.4 of this procedure.

NOTE: The performance of periodic tests which temporarily remove all or part of a Fire Protection System from service does not render a system inoperable if the system will be out of service for less than one shift (8 hours). Only one Fire Protection Cooldown Train shall be tested at one time.

4.4 Impairment of Fire Protection Systems

4.4.1 All routine, planned, emergency, or unplanned impairments of equipment/components/systems in the FPORs (as noted above), shall be recorded in the Fire Protection Impairment Log (Attachment 1).

4.4.2 NLR-20, ANI Notifications, describes the actions taken to notify American Nuclear Insurers (ANI) of impaired fire protection systems/components.

4.4.3 The Fire Protection Engineer shall be notified of all impairments logged per 4.4.1 above. The Impairment Log is used primarily as a tool to track impaired systems/components and a log for the FPE's periodic review.

4.4.4 Each log entry should include the system/component affected, time and date, FPOR involved, cause of inoperability, actions taken, and FPE notification.

| **4.5 Surveillance Requirements**

| Surveillance requirements for Fire Protection Systems identify minimum requirements for periodic testing or inspection that is delineated by the FSAR, FPPP, National Fire Codes, and American Nuclear Insurers. These requirements are met by performance of surveillances.

| NOTE: The surveillance requirements must be completed within $\pm 25\%$ of the specified frequency. Should the periodic test requirements exceed these limitations, the protection system shall be declared inoperable until such time that it passes the required test(s).

| **5.0 REFERENCES**

- | 5.1 Fire Protection Program Plan (FPPP)
- | 5.2 Appendix R Evaluation, May 15, 1985, Revision
- | 5.3 FSV FPPP, Rev. 3, March 28, 1990 (G-90041)
- | 5.4 NLR-20, ANI Notifications

| **6.0 ATTACHMENT**

- | 6.1 Attachment 1 - Fire Protection Impairment Log

| **7.0 COMMITMENTS**

| None



FIRE PROTECTION IMPAIRMENT LOG

IMPAIRMENT TIME & DATE	SYSTEM/COMPONENT INVOLVED REASON FOR IMPAIRMENT ACTIONS TAKEN	FPOR INVOLVED	FIRE PROTECTION ENGINEER NOTIFIED TIME & DATE	RESTORATION TIME & DATE

FIRE PROTECTION IMPAIRMENT LOG

IMPAIRMENT TIME & DATE	SYSTEM/COMPONENT INVOLVED REASON FOR IMPAIRMENT ACTIONS TAKEN	FPOR INVOLVED	FIRE PROTECTION ENGINEER NOTIFIED TIME & DATE	RESTORATION TIME & DATE

FIRE PROTECTION OPERABILITY REQUIREMENTS

Fire Barriers

FPOR-13 The cable, piping and ventilation duct penetration seals and associated barriers, i.e., walls, floors and ceilings, listed on Table FPOR-13-1 are required to be operable.

APPLICABILITY: At all times

| ACTION: See Note 1

With one or more of the required barriers or seals inoperable, within 1 hour, establish a continuous fire watch on at least one side of the affected barrier or seal.

NOTE: This may be changed to an hourly fire watch patrol based on the Fire Protection Engineer's evaluation.

SURVEILLANCE REQUIREMENTS

The cable, piping, ventilation duct penetration seals, and associated barriers in Table FPOR-13-1 shall be demonstrated operable:

| a. See Note 1

At least once per 18 months, by visually inspecting at least 10% of each type of seal. If seal damage is found, an evaluation shall be performed to show that the damage has not degraded the fire rating of the seal. If a seal is determined to be inoperable, a visual inspection of an additional 10% of that type of sealed penetration shall be made. This inspection process will continue until a 10% sample passes the inspection with no failed seals. Samples shall be selected such that each penetration will be inspected every 15 years.

b. Following any activity which disturbs a seal; it shall be visually inspected.

NOTE: Where accessible, both sides of a seal shall be inspected.

| _____

| Note 1: This requirement does not apply to the asterisked seals in
| Table FPOR-13-1. The asterisked seals are fire seals.
| They will be maintained as Halon barriers only.

BASIS FOR FPOR-13

The operability of the fire barriers and penetration seals ensures that fire damage will be limited, as analyzed in the FPPP. These design features minimize the possibility of a single fire involving more than one fire area prior to detection and extinguishment.

The visual inspection interval and fire barrier quantities are in accordance with industry practice and the Westinghouse Standard Technical Specifications, Rev. 5. Fire barriers and penetration seals are considered operable when the visually observed condition is the same as the as-designed condition. For those fire barrier penetrations that are not in the as-designed condition, an evaluation shall be performed to show that the abnormal condition has not degraded the fire rating of the fire barrier penetration.

In the event that a seal is not intact, a continuous fire watch on one side of the affected barrier containing the seal, or an hourly fire watch patrol based on the Fire Protection Engineer's evaluation will ensure early notification of a fire.

The Fire Protection Engineer (FPE) shall evaluate these inspection reports and may require additional inspections to take place. The FPE will review the inspection reports to ensure barrier integrity, color of the penetration seals, and other parameters as deemed necessary.

| The 480V Switchgear (480V) Room, Auxiliary Electric Equipment (AEE) Room, Building 10 Walkover Structure, and Building 10 fire areas have been redefined and included with the Turbine Building as one fire area. This activity and its effects have been examined in Engineering Evaluation EE-FP-024, Rev. A, Fire Area Redefinition, and a 10 CFR 50.59 Safety Evaluation was prepared in support of the redefinition. One Fire Protection Cooldown Train will survive postulated fires in any plant location and the consequences of fires analyzed in the FPPP are not increased.

| The asterisked seals in Table FPOR-13-1 will not be maintained as fire barriers. However, their integrity as a Halon barrier will be maintained since there is no appreciable degradation over time. Following any activity which disturbs a seal, the seal will be inspected for damage and repaired as appropriate.

TABLE: FPOR-13-1

REQUIRED CABLE, PIPING, AND VENTILATION DUCT PENETRATION SEALS

THREE ROOM COMPLEX

NORTH WALL, EL. 4791-4811 & SOUTH WALL BATTERY ROOMS

JWD3	WP12	WP16	*BR-001	*BR-006
WP9	WP13	TRC-010	*BR-002	*BR-007
WP10	WP14	TRC-011	*BR-003	*BR-008
WP11	WP15	TRC-057	*BR-004	

SOUTH WALL, EL. 4791-4811

*82T2	*76B1	*72M2	*TRC-004	*TRC-055
*82M2	*74T2	*72B2	*TRC-005	*TRC-056
*82B2	*74M2	*GWD4	*TRC-007	*TRC-094
*80M1	*74B2	*GWD7	*TRC-008	
*78T1	*72T2	*B852	*TRC-009	

EAST WALL, EL. 4791-4811

*8WD5	*8WD9	*TRC-047	*TRC-051	
*8WD6	*8WD14	*TRC-048	*TRC-052	
*8WD7	*8WD15	*TRC-049	*TRC-053	
*8WD8	*8WD16	*TRC-050	*TRC-054	

WEST WALL, EL. 4791

*62T	*62B	*5WD9	*TRC-001	*TRC-003
*62T	*5WD4	*5WD10	*TRC-002	*TRC-068

NORTH WALL, EL. 4811-4829

WP1	WP4	WP7	JWD1-2	JWD10
WP2	WP5	WP8	JWD2-1	JWD11
WP3	WP6	JWD1-1	JWD2-2	

SOUTH WALL, EL. 4811-4829

*32M1	*B292-1	*TRC-021	*TRC-027	*TRC-031-3
*35T1	*B292-2	*TRC-022	*TRC-028	*TRC-058
*38B1	*43T2	*TRC-023	*TRC-029	*TRC-059
*GWD1	*43M2	*TRC-024	*TRC-030	*TRC-060
*GWD2	*43B2	*TRC-025	*TRC-031-1	*TRC-061
*GWD5	*TRC-019	*TRC-026	*TRC-031-2	*TRC-069
*GWD6	*TRC-020			

TABLE: FPOR-13-1

REQUIRED CABLE, PIPING, AND VENTILATION DUCT PENETRATION SEALS

THREE ROOM COMPLEX (con't)

EAST WALL, EL. 4811-4829

*8WD1	*8WD4	*8WD12	*TRC-032	*TRC-035
*8WD2	*8WD10	*8WD17	*TRC-033	*TRC-036
*8WD3	*8WD11	*B668	*TRC-034	*TRC-037

WEST WALL, EL. 4811-4829

*30T1	*5WD2	*5WD8	*TRC-014	*TRC-018
*30M1	*5WD3	*5WD11	*TRC-015	*TRC-062
*30B1	*5WD5	*TRC-012	*TRC-016	*TRC-063
*5WD1	*5WD6	*TRC-013	*TRC-017	*TRC-064

NORTH WALL, EL. 4829-4846

TRC-041

SOUTH WALL, EL. 4829-4846

XIC-7818	B374	B365	B655	TRC-040
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WEST WALL, EL. 4829-4846

TRC-065

EAST WALL, EL. 4829-4846

TRC-042

| AUXILIARY ELECTRIC ROOM FLOOR, EL. 4811

*1AF01	*1AF07	*1AF12	*1AF17	*1AF22
*3AF02	*1AF08	*1AF13	*1AF18	*1AF23
*3AF03	*1AF09	*1AF14	*1AF19	*1AF24
*3AF04	*1AF10	*1AF15	*1AF20	*1AF25
*3AF05	*1AF11	*1AF16	*3AF21	*1AF26
*1AF06				

| _____

| * See Page 9 of 9 for explanation.

TABLE: FPOR-13-1

REQUIRED CABLE, PIPING, AND VENTILATION DUCT PENETRATION SEALS

THREE ROOM COMPLEX (con't)

| 480V ROOM FLOOR, EL. 4791

*TRC-70	*TRC-75	*TRC-80	*TRC-85	*TRC-90
*TRC-71	*TRC-76	*TRC-81	*TRC-86	*TRC-91
*TRC-72	*TRC-77	*TRC-82	*TRC-87	*TRC-92
*TRC-73	*TRC-78	*TRC-83	*TRC-88	*TRC-93
*TRC-74	*TRC-79	*TRC-84	*TRC-89	

TURBINE LUBE OIL RESERVOIR ROOM

NORTH WALL

LOR-001	LOR-006	LOR-011	LOR-016	LOR-021
LOR-002	LOR-007	LOR-012	LOR-017	LOR-022
LOR-003	LOR-008	LOR-013	LOR-018	LOR-023
LOR-004	LOR-009	LOR-014	LOR-019	LOR-027
LOR-005	LOR-010	LOR-015	LOR-020	

WEST WALL

LOR-024	LOR-025	LOR-026	LOR-028	LOR-029
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TURBINE LUBE OIL STORAGE ROOM

SOUTH WALL

LOS-001	LOS-004	LOS-007	LOS-010	LOS-013
LOS-002	LOS-005	LOS-008	LOS-011	
LOS-003	LOS-006	LOS-009	LOS-012	

AUXILIARY BOILER ROOM

NORTH WALL

AB-024	AB-025	AB-026	AB-027	AB-028
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EAST WALL

AB-001	AB-007	AB-012	AB-017	AB-022
AB-002	AB-008	AB-013	AB-018	AB-023
AB-003	AB-009	AB-014	AB-019	AB-049
AB-004	AB-010	AB-015	AB-020	AB-050
AB-005	AB-011	AB-016	AB-021	AB-051
AB-006				

| * See Page 9 of 9 for explanation.

TABLE: FPOR-13-1

REQUIRED CABLE, PIPING, AND VENTILATION DUCT PENETRATION SEALS

AUXILIARY BOILER ROOM (con't)

CEILING

AB-029	AB-033	AB-037	AB-041	AB-045
AB-030	AB-034	AB-038	AB-042	AB-046
AB-031	AB-035	AB-039	AB-043	AB-047
AB-032	AB-036	AB-040	AB-044	AB-048

EMERGENCY DIESEL GENERATOR ROOMS

ROOM 1A AND 1B, NORTH WALL

B154	DG-001	DG-003	DG-005
B155	DG-002	DG-004	DG-006

ROOM 1A, WEST WALL

B360	B377	DG-009	DG-044
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ROOM 1A AND 1B, DIVIDING WALL

B396	DG-007	DG-008
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ROOM 1A, CEILING

DG-010	DG-015	DG-019	DG-023	DG-048
DG-011	DG-016	DG-020	DG-024	DG-049
DG-012	DG-017	DG-021	DG-025	DG-050
DG-014	DG-018	DG-022	DG-045	DG-056

ROOM 1B, CEILING

DG-026	DG-031	DG-036	DG-041	DG-052
DG-027	DG-032	DG-037	DG-042	DG-053
DG-028	DG-033	DG-038	DG-043	DG-054
DG-029	DG-034	DG-039	DG-047	DG-055
DG-030	DG-035	DG-040	DG-051	

ROOM 1B EAST WALL

DG-046

TABLE: FPOR-13-1

REQUIRED CABLE, PIPING, AND VENTILATION DUCT PENETRATION SEALS

BUILDING 10

| WEST WALL, EL. 4791-4811

*404T	*404M-A	*BT-002	*BT-005	*BT-008
*404T-A	*404B	*BT-003	*BT-006	*BT-009
*404T-B	*414	*BT-004	*BT-007	*BT-040
*404M	*BT-001			

BATTERY ROOM 1C

*1CB-001	*1CB-003	*1CB-005	*1CB-007	*1CB-010
*1CB-002	*1CB-004	*1CB-006	*1CB-008	*1CB-011

FLOOR EL. 4800

*BT-010	*BT-015	*BT-041	*BT-046	*2BT-17
*BT-011	*BT-016	*BT-042	*BT-051	*2BT-38
*BT-012	*BT-016-1	*BT-043	*BT-052	*2BT-69
*BT-013	*BT-017	*BT-044	*BT-053	*2BT-72
*BT-014	*BT-019	*BT-045	*BT-054	

FLOOR EL. 4811

*BT-020	*BT-025	*BT-058	*BT-063	*BT-068
*BT-021	*BT-026	*BT-059	*BT-064	*BT-069
*BT-022	*BT-055	*BT-060	*BT-065	*BT-070
*BT-023	*BT-056	*BT-061	*BT-066	
*BT-024	*BT-057	*BT-062	*BT-067	

FLOOR EL. 4824

*BT-027	*BT-031	*BT-034	*BT-071	*BT-074
*BT-028	*BT-032	*BT-035	*BT-072	*BT-075
*BT-029	*BT-033	*BT-036	*BT-073	*BT-076
*BT-030				

FLOOR EL. 4791

*BT-077	*BT-080	*BT-083	*BT-086	*BT-089
*BT-078	*BT-081	*BT-084	*BT-087	
*BT-079	*BT-082	*BT-085	*BT-088	

TABLE: FPOR-13-1

REQUIRED CABLE, PIPING, AND VENTILATION DUCT PENETRATION SEALS

BUILDING 10 (con't)

FLOOR EL. 4835'-6"

*BT-106	*BT-110	*BT-114	*BT-118	*BT-122
*BT-107	*BT-111	*BT-115	*BT-119	*BT-123
*BT-108	*BT-112	*BT-116	*BT-120	*BT-124
*BT-109	*BT-113	*BT-117	*BT-121	*BT-125

EAST WALL EL. 4791-4811

*BT-091	*BT-092
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WEST WALL EL. 4835'-6"

*1BX15-1	*1BX15-2	*BT-095	*BT-096
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WEST WALL EL. 4824

*BT-097	*BT-098
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WEST WALL EL. 4811

*9WD4	*BT-099	*BT-101	*BT-103	*BT-105
*9WD5	*BT-100	*BT-102	*BT-104	

FIRE WATER PUMP HOUSE

NORTH & SOUTH ROOMS

1FW-001	1FW-008	1FW-015	1FW-022	1FW-028
1FW-002	1FW-009	1FW-016	1FW-023	1FW-029
1FW-003	1FW-010	1FW-017	1FW-024	1FW-030
1FW-004	1FW-011	1FW-018	1FW-025	1FW-031
1FW-005	1FW-012	1FW-019	1FW-026	1FW-032
1FW-006	1FW-013	1FW-020	1FW-027	1FW-033
1FW-007	1FW-014	1FW-021		

CIRC WTR MAKE-UP PUMP BLDG

1CW01	1CW04	2CW06
1CW02	1CW05	1CW07

| _____

| * See Page 9 of 9 for explanation.

TABLE: FPOR-13-1

REQUIRED CABLE, PIPING, AND VENTILATION DUCT PENETRATION SEALS

RECORDS CENTER

NORTH WALL, EL. 4790

1RS-001	1RS-005	1RS-009
1RS-002	1RS-006	1RS-010
1RS-003	1RS-007	1RS-011
1RS-004	1RS-008	1RS-012

EAST WALL, EL. 4790

1RS-014	1RS-015
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WEST WALL, EL. 4790

1RS-013

| _____

| * These seals will be maintained as Halon barriers only. They are
| not required as fire barriers. Only Surveillance Requirement b.
| applies. The ACTION statement does not apply to these seals.

FIRE PROTECTION OPERABILITY REQUIREMENTS

Fire Doors

FPOR-14 The fire doors listed in Table FPOR-14-1 shall be operable.

APPLICABILITY: At all times

| ACTION: See Note 1

With one or more of the required fire doors inoperable, within 1 hour, establish a continuous fire watch on at least one side of the affected door(s).

NOTE: This watch may be changed to an hourly fire watch patrol based on an evaluation by the Fire Protection Engineer.

EXCEPTION: Fire doors may be opened for brief periods (i.e., personnel and equipment access and egress, not to exceed 20 minutes) without taking the actions described above. However, for fire doors which will be open for longer periods of time, the aforementioned actions apply.

SURVEILLANCE REQUIREMENTS

The required fire doors shall be demonstrated operable:

- a. At least once per 24 hours, by verifying each fire door is closed.
- b. At least once per 31 days or following maintenance work on the door by:
 1. Functionally testing and visually inspecting each fire door, and replacing any damaged hardware (i.e., hinges, latches, catches, closers, etc.).
 2. Verifying combustible materials are not stored near the door and the door opening is not obstructed.
- | c. At least once per 184 days by: (See Note 1)
 1. Verifying that automatic hold-open, release, and closing mechanisms and latches are operable.
 2. Verifying door to frame clearances and door to door clearances are within acceptable limits.

| _____
| Note 1: This requirement does not apply to the asterisked doors in
| Table FPOR-14-1. The asterisked doors are not fire doors.
| They will be maintained as Halon barriers only.

BASIS FOR FPOR-14

The operability of the fire doors ensures that fire damage will be limited, as analyzed in the FPPP. These design features minimize the possibility of a single fire involving more than one fire area prior to detection and extinguishment.

In the event that a fire door does not remain intact, a continuous fire watch on one side of the affected door or an hourly fire watch patrol based on the Fire Protection Engineer's Evaluation will ensure early notification of a fire.

Verifying the position of each fire door at least once per 24 hours ensures that the fire doors are in their as-designed condition to confine or retard fires from spreading to adjacent portions of the facility and to maintain the Halon barrier for fire suppression purposes. Visually inspecting and functionally testing each fire door at least once per 31 days, ensures closing mechanisms, latches, hinges, and catches will be able to perform their design function when required. Verifying that the door is returned to its original condition following any maintenance or repair work which disturbs the door ensures that it was not damaged or altered in any way to prevent it from performing its design function.

Maintaining the immediate door area free of combustibles and obstructions helps ensure free operation of the door and reduce the possibility of fire spread from one area to another.

Verification that automatic hold-open, release and closing mechanisms and latches are operable, and door frame clearances are within limits, ensures the doors are an effective part of the fire barrier. Acceptable door frame clearances have been determined using Engineering Evaluation EE-FP-0018, Rev. A, Fire Door Tests.

The 24 hour and 184 day surveillance requirements and frequencies are in accordance with the requirements of 10CFR50, Appendix R, Section N and Branch Technical Position APCSB 9.5-1, Section c.5.a.(5).

The 480V Switchgear (480V) Room, Auxiliary Electric Equipment (AEE) Room, Building 10 Walkover Structure, and Building 10 fire areas have been redefined and included with the Turbine Building as one fire area. This activity and its effects have been examined in Engineering Evaluation EE-FP-024, Rev. A, Fire Area Redefinition, and a 10 CFR 50.59 Safety Evaluation was prepared in support of the redefinition. One Fire Protection Cooldown Train will survive postulated fires in any plant location and the consequences of fires analyzed in the FPPP are not increased.

The asterisked doors in Table FPOR-14-1 will not be maintained as fire barriers. However, their integrity as a Halon barrier will be assured by verifying the doors are closed, function normally, and following maintenance, a door is inspected for damage and repaired as appropriate.

TABLE: FPOR-14-1

DOOR #	ELEVATION	NAME
D5	4824	Bldg 10 East Interior Door
*D6	4811	Bldg 10 Walkover Structure (East Door)
*D7	4811	Bldg 10 Computer Rm 5 (Door between N & S)
D8	4811	Bldg 10 Computer Rm. N (East Door)
*D9	4791	Bldg 10 Walkover Structure (East Door)
*D10	4791	Bldg 10 Inverter 1A (Dbl Door Between Rm 1 & 3)
*D11	4791	Bldg 10 Battery 1C Rm
D12	4791	Bldg 10 Inverter 1A (Dbl Door East Side Inside)
*D16	4829	Bldg 10 Walkover Structure (East Door)
*13	4791	480 Volt Switchgear Rm (East Door)
*14	4811	Aux Elec Equip Rm (East Door)
15	4829	Control Rm (East Door)
17	4829	Control Rm (East Door)
66	4829	Control Rm West Door
68	4829	Control Rm Middle Doors
76	4791	Aux Boiler South Doors
77	4791	Aux Boiler East Doors
79	4791	Diesel Generator Room, West Door, North End
80	4791	Diesel Generator Room, Dividing Wall, North End
81	4791	Diesel Generator Room, Dividing Wall, South End
82	4791	Diesel Generator Room, East Door, North End
*90	4791	480 Volt Switchgear Room
91	4792'-10"	Turbine Lube Oil Storage Rm
94	4792'-7"	Turbine Lube Oil Reservoir Rm
*95	4811	Aux Elec Equip Rm South End
*96	4811	Aux Elec Equip Rm West End
142		Electric Fire Water Pump Room
RSD 1	4789'-5"	Records Center West Door
RSD 7	4790'-2"	Records Center East Door
RSD 8	4790'-2"	Records Center East Door

| * These doors will be maintained as Halon barriers only. They are
| not required fire doors. Only Surveillance Requirements a. and b.
| apply. The ACTION statement does not apply to these doors.

FIRE PROTECTION OPERABILITY REQUIREMENTS

Fire Dampers

FPOR-15 The fire dampers listed in Table FPOR-15-1 shall be operable.

APPLICABILITY: At all times

| ACTION: See Note 1

With one or more of the required fire dampers inoperable, within 1 hour, establish a continuous fire watch on at least one side of the barrier containing the affected damper(s).

NOTE: This may be changed to an hourly fire watch patrol based on the Fire Protection Engineer's evaluation.

SURVEILLANCE REQUIREMENTS

The required fire dampers shall be demonstrated operable once per 12 months or following any maintenance or repair work on the dampers, by:

- a. Visually inspecting each damper and the associated hardware, and
- b. Functionally testing each fire damper.

NOTES (1): Where accessibility is possible, fused link dampers are functionally tested.

(2): Dampers in Building 10 will be inspected and tested during the periodic testing requirements associated with FPOR-3.

| _____

| Note 1: This requirement does not apply to the asterisked dampers in
| Table FPOR-15-1. The asterisked dampers are not fire
| dampers. They will be maintained as Halon barriers only.

BASIS FOR FPOR-15

The operability of the fire dampers ensures that fire damage will be limited, as analyzed in the FPPP. These design features minimize the possibility of a single fire involving more than one fire area prior to detection and extinguishment.

In the event that a fire damper does not remain intact, a continuous fire watch on one side of the affected damper or an hourly fire watch patrol based on the Fire Protection Engineer's Evaluation will ensure prompt notification of a fire.

The fire dampers are periodically inspected to verify their operability.

Visually inspecting each damper and associated hardware, once per 12 months, and functionally testing each accessible fire damper once per 12 months ensures that the closing mechanism will be able to perform its design function when required. Verifying that the damper is returned to its original condition following any maintenance or repair work which disturbs the damper ensures that it was not damaged or altered in any way to prevent it from performing its design function.

| The 480V Switchgear (480V) Room, Auxiliary Electric Equipment (AEE) Room, Building 10 Walkover Structure, and Building 10 fire areas have been redefined and included with the Turbine Building as one fire area. This activity and its effects have been examined in Engineering Evaluation EE-FP-024, Rev. A, Fire Area Redefinition, and a 10 CFR 50.59 Safety Evaluation was prepared in support of the redefinition. One Fire Protection Cooldown Train will survive postulated fires in any plant location and the consequences of fires analyzed in the FPPP are not increased.

TABLE: FPOR-15-1

REQUIRED FIRE DAMPERS

BUILDING 10:

*FDV-45321-2	*FDV-45324-2	*FDV-45327-2	*FDV-45330-2	*FDV-45332-2
*FDV-45322-2	*FDV-45325-2	*FDV-45328-2	*FDV-45331-2	*FDV-45333-2
*FDV-45323-2	*FDV-45326-2	*FDV-45329-2		

| DIESEL GENERATOR ROOMS

| FDV-75378 FDV-75379

FIRE WATER PUMP HOUSE

FDV-45403

AUXILIARY BOILER ROOM

FDV-75371 FDV-75372
FDV-75373 FDV-75374
FDV-75375

| TURBINE LUBE OIL RESERVOIR ROOM

| FDV-75369 FDV-75370

TURBINE LUBE OIL STORAGE ROOM

FDV-75367 FDV-75368

CONTROL ROOM/ELECTRIC EQUIPMENT ROOM

*DV-75298	*DV-75328	DV-75323	DV-75326
*DV-75299	*DV-75329	DV-75324	DV-75327
*DV-75300	*DV-75363	DV-75325	DV-75330
*DV-75303			

480 VOLT ROOM

| *DV-75331 *DV-75333
| *DV-75332 *DV-75334

| _____

| * These dampers will be maintained as Halon barriers only. They are
| not required fire dampers. The ACTION statement does not apply to
| these dampers.