

Entergy Operations, Inc. 17265 River Road Killona, LA 70066 Tel 504 739 6660 Fax 504 739 6678

Charles M. Dugger Vice President, Operations Waterford 3

W3F1-00-0004 A4.05 PR

January 8, 2000

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

Subject:

Waterford 3 SES Docket No. 50-382 License No. NPF-38 Final Safety Analysis Report - Revision 10 Supplement

Gentlemen:

By letter dated October 1, 1999, (W3F1-99-0145), Entergy submitted Revision 10 to the Waterford 3 Steam Electric Station Unit 3 Updated Final Safety Analysis Report in accordance with 10CFR50.71(e) and 10CFR50.4(b)(6).

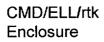
. .

Subsequent to that submittal, Entergy identified that the revision bar was inadvertently omitted from page 9.5-43. This page has been corrected. Eleven copies of the page are enclosed. To update your copy of the UFSAR, please remove the affected page and insert the enclosed replacement.

This letter does not contain commitments. Should you require further information, please contact E.L. Lemke at (504) 739-6349.

Very truly yours,

C.M. Dugger Vice President, Operations Waterford 3



PDN ADOCH 0700387

H053

Final Safety Analysis Report - Revision 10 W3F1-00-0004 Page 2 January 8, 2000

-

cc: (w/Enclosure) E.W. Merschoff, NRC Region IV N. Kalyanam, NRC-NRR NRC Resident Inspectors Office

> (w/o Enclosure) J. Smith N.S. Reynolds

E. Fire Detection and Suppression

- 1. Fire Detection
 - (a) Fire detection systems should, as a minimum, comply with NFPA 72D, "Standard for the Installation, Maintenance and Use of Proprietary Protective Signaling Systems."

- (b) Fire detection system should give audible and visual alarm and annunciation in the Control Room. Local audible alarms should also sound at the location of the fire.
- (c) Fire alarms should be distinctive and unique. They should not be capable of being confused with any other plant system alarms.
- (d) Fire detection and actuation systems should be connected to the plant emergency power supply.

Each fire detection system for safety-related plant areas performing either fire detection only, or fire detection/actuation of an automatic suppression system is designed in accordance with Class A circuitry as defined in NFPA-72D, from the detection loop to each Fire Local Control Panel (FLCP). From each FLCP to the Master Remote Control Panel (MRCP) located in the Control Room, Class B supervised circuitry per NFPA-72D is provided. In addition, a duplicate set of alarm and trouble conditions are wired from each FLCP to the plant computer and displayed on a CRT in the Control Room. Thus, the intent of Class A design, as defined in NFPA-72D, for the entire fire detection, alarm and signaling system for the plant is achieved.

Fire detection initiating device circuits, for some areas, are arranged such that both redundant circuits are contained in a common raceway for a limited length of the raceway. These areas have been evaluated and found to be acceptable in regards to potential physical damage to the raceway.

The thermistor wire detectors provided for the charcoal filter units have Class B circuitry from the detection loop to the Fire Local Control Panel, and alarms in the Control Room on CP-19.

Fire detection systems give audible and visual alarm in the Control Room. Local audible alarms are provided.

Fire alarm signals utilize devices to produce sounds distinctive from those of other alarm systems.

E. Fire Detection and Suppression

- 1. Fire Detection
 - (a) Fire detection systems should, as a minimum, comply with NFPA 72D, "Standard for the Installation, Maintenance and Use of Proprietary Protective Signaling Systems."

(b) Fire detection system should give audible and visual alarm and annunciation in the Control Room. Local audible alarms should also sound at the location of the fire.

- (c) Fire alarms should be distinctive and unique. They should not be capable of being confused with any other plant system alarms.
- (d) Fire detection and actuation systems should be connected to the plant emergency power supply.

Each fire detection system for safety-related plant areas performing either fire detection only, or fire detection/actuation of an automatic suppression system is designed in accordance with Class A circuitry as defined in NFPA-72D, from the detection loop to each Fire Local Control Panel (FLCP). From each FLCP to the Master Remote Control Panel (MRCP) located in the Control Room, Class B supervised circuitry per NFPA-72D is provided. In addition, a duplicate set of alarm and trouble conditions are wired from each FLCP to the plant computer and displayed on a CRT in the Control Room. Thus, the intent of Class A design, as defined in NFPA-72D, for the entire fire detection, alarm and signaling system for the plant is achieved.

Fire detection initiating device circuits, for some areas, are arranged such that both redundant circuits are contained in a common raceway for a limited length of the raceway. These areas have been evaluated and found to be acceptable in regards to potential physical damage to the raceway.

The thermistor wire detectors provided for the charcoal filter units have Class B circuitry from the detection loop to the Fire Local Control Panel, and alarms in the Control Room on CP-19.

Fire detection systems give audible and visual alarm in the Control Room. Local audible alarms are provided.

Fire alarm signals utilize devices to produce sounds distinctive from those of other alarm systems.

E. Fire Detection and Suppression

- 1. Fire Detection
 - (a) Fire detection systems should, as a minimum, comply with NFPA 72D, "Standard for the Installation, Maintenance and Use of Proprietary Protective Signaling Systems."

(b) Fire detection system should give audible and visual alarm and annunciation in the Control Room. Local audible alarms should also sound at the location of the fire.

- (c) Fire alarms should be distinctive and unique. They should not be capable of being confused with any other plant system alarms.
- (d) Fire detection and actuation systems should be connected to the plant emergency power supply.

Each fire detection system for safety-related plant areas performing either fire detection only, or fire detection/actuation of an automatic suppression system is designed in accordance with Class A circuitry as defined in NFPA-72D, from the detection loop to each Fire Local Control Panel (FLCP). From each FLCP to the Master Remote Control Panel (MRCP) located in the Control Room, Class B supervised circuitry per NFPA-72D is provided. In addition, a duplicate set of alarm and trouble conditions are wired from each FLCP to the plant computer and displayed on a CRT in the Control Room. Thus, the intent of Class A design, as defined in NFPA-72D, for the entire fire detection, alarm and signaling system for the plant is achieved.

Fire detection initiating device circuits, for some areas, are arranged such that both redundant circuits are contained in a common raceway for a limited length of the raceway. These areas have been evaluated and found to be acceptable in regards to potential physical damage to the raceway.

The thermistor wire detectors provided for the charcoal filter units have Class B circuitry from the detection loop to the Fire Local Control Panel, and alarms in the Control Room on CP-19.

Fire detection systems give audible and visual alarm in the Control Room. Local audible alarms are provided.

Fire alarm signals utilize devices to produce sounds distinctive from those of other alarm systems.

E. Fire Detection and Suppression

- 1. Fire Detection
 - (a) Fire detection systems should, as a minimum, comply with NFPA 72D, "Standard for the Installation, Maintenance and Use of Proprietary Protective Signaling Systems."

(b) Fire detection system should give audible and visual alarm and annunciation in the Control Room. Local audible alarms should also sound at the location of the fire.

- (c) Fire alarms should be distinctive and unique. They should not be capable of being confused with any other plant system alarms.
- (d) Fire detection and actuation systems should be connected to the plant emergency power supply.

Each fire detection system for safety-related plant areas performing either fire detection only, or fire detection/actuation of an automatic suppression system is designed in accordance with Class A circuitry as defined in NFPA-72D, from the detection loop to each Fire Local Control Panel (FLCP). From each FLCP to the Master Remote Control Panel (MRCP) located in the Control Room, Class B supervised circuitry per NFPA-72D is provided. In addition, a duplicate set of alarm and trouble conditions are wired from each FLCP to the plant computer and displayed on a CRT in the Control Room. Thus, the intent of Class A design, as defined in NFPA-72D, for the entire fire detection, alarm and signaling system for the plant is achieved.

Fire detection initiating device circuits, for some areas, are arranged such that both redundant circuits are contained in a common raceway for a limited length of the raceway. These areas have been evaluated and found to be acceptable in regards to potential physical damage to the raceway.

The thermistor wire detectors provided for the charcoal filter units have Class B circuitry from the detection loop to the Fire Local Control Panel, and alarms in the Control Room on CP-19.

Fire detection systems give audible and visual alarm in the Control Room. Local audible alarms are provided.

Fire alarm signals utilize devices to produce sounds distinctive from those of other alarm systems.

E. Fire Detection and Suppression

- 1. Fire Detection
 - (a) Fire detection systems should, as a minimum, comply with NFPA 72D, "Standard for the Installation, Maintenance and Use of Proprietary Protective Signaling Systems."

(b) Fire detection system should give audible and visual alarm and annunciation in the Control Room. Local audible alarms should also sound at the location of the fire.

- (c) Fire alarms should be distinctive and unique. They should not be capable of being confused with any other plant system alarms.
- (d) Fire detection and actuation systems should be connected to the plant emergency power supply.

Each fire detection system for safety-related plant areas performing either fire detection only, or fire detection/actuation of an automatic suppression system is designed in accordance with Class A circuitry as defined in NFPA-72D, from the detection loop to each Fire Local Control Panel (FLCP). From each FLCP to the Master Remote Control Panel (MRCP) located in the Control Room, Class B supervised circuitry per NFPA-72D is provided. In addition, a duplicate set of alarm and trouble conditions are wired from each FLCP to the plant computer and displayed on a CRT in the Control Room. Thus, the intent of Class A design, as defined in NFPA-72D, for the entire fire detection, alarm and signaling system for the plant is achieved.

Fire detection initiating device circuits, for some areas, are arranged such that both redundant circuits are contained in a common raceway for a limited length of the raceway. These areas have been evaluated and found to be acceptable in regards to potential physical damage to the raceway.

The thermistor wire detectors provided for the charcoal filter units have Class B circuitry from the detection loop to the Fire Local Control Panel, and alarms in the Control Room on CP-19.

Fire detection systems give audible and visual alarm in the Control Room. Local audible alarms are provided.

Fire alarm signals utilize devices to produce sounds distinctive from those of other alarm systems.

E. Fire Detection and Suppression

- 1. Fire Detection
 - (a) Fire detection systems should, as a minimum, comply with NFPA 72D, "Standard for the Installation, Maintenance and Use of Proprietary Protective Signaling Systems."

(b) Fire detection system should give audible and visual alarm and annunciation in the Control Room. Local audible alarms should also sound at the location of the fire.

- (c) Fire alarms should be distinctive and unique. They should not be capable of being confused with any other plant system alarms.
- (d) Fire detection and actuation systems should be connected to the plant emergency power supply.

Each fire detection system for safety-related plant areas performing either fire detection only, or fire detection/actuation of an automatic suppression system is designed in accordance with Class A circuitry as defined in NFPA-72D, from the detection loop to each Fire Local Control Panel (FLCP). From each FLCP to the Master Remote Control Panel (MRCP) located in the Control Room, Class B supervised circuitry per NFPA-72D is provided. In addition, a duplicate set of alarm and trouble conditions are wired from each FLCP to the plant computer and displayed on a CRT in the Control Room. Thus, the intent of Class A design, as defined in NFPA-72D, for the entire fire detection, alarm and signaling system for the plant is achieved.

Fire detection initiating device circuits, for some areas, are arranged such that both redundant circuits are contained in a common raceway for a limited length of the raceway. These areas have been evaluated and found to be acceptable in regards to potential physical damage to the raceway.

The thermistor wire detectors provided for the charcoal filter units have Class B circuitry from the detection loop to the Fire Local Control Panel, and alarms in the Control Room on CP-19.

Fire detection systems give audible and visual alarm in the Control Room. Local audible alarms are provided.

Fire alarm signals utilize devices to produce sounds distinctive from those of other alarm systems.

E. Fire Detection and Suppression

- 1. Fire Detection
 - (a) Fire detection systems should, as a minimum, comply with NFPA 72D, "Standard for the Installation, Maintenance and Use of Proprietary Protective Signaling Systems."

Fire Local Control Panel (FLCP). From each FLCP to the Master Remote Control Panel (MRCP) located in the Control Room, Class B supervised circuitry per NFPA-72D is provided. In addition, a duplicate set of alarm and trouble conditions are wired from each FLCP to the plant computer and displayed on a CRT in the Control Room. Thus, the intent of Class A design, as defined in NFPA-72D, for the entire fire detection, alarm and signaling system for the plant is achieved.

Each fire detection system for safety-related plant areas

detection/actuation of an automatic suppression system

is designed in accordance with Class A circuitry as defined in NFPA-72D, from the detection loop to each

performing either fire detection only, or fire

Fire detection initiating device circuits, for some areas, are arranged such that both redundant circuits are contained in a common raceway for a limited length of the raceway. These areas have been evaluated and found to be acceptable in regards to potential physical damage to the raceway.

The thermistor wire detectors provided for the charcoal filter units have Class B circuitry from the detection loop to the Fire Local Control Panel, and alarms in the Control Room on CP-19.

- (b) Fire detection system should give F audible and visual alarm and annunciation in the the Control Room. Local audible alarms should also sound at the location of the fire.
- (c) Fire alarms should be distinctive and unique. They should not be capable of being confused with any other plant system alarms.
- (d) Fire detection and actuation systems should be connected to the plant emergency power supply.

Fire detection systems give audible and visual alarm in the Control Room. Local audible alarms are provided.

Fire alarm signals utilize devices to produce sounds distinctive from those of other alarm systems.

E. Fire Detection and Suppression

- 1. Fire Detection
 - (a) Fire detection systems should, as a minimum, comply with NFPA 72D, "Standard for the Installation, Maintenance and Use of Proprietary Protective Signaling Systems."

(b) Fire detection system should give audible and visual alarm and annunciation in the Control Room. Local audible alarms should also sound at the location of the fire.

- (c) Fire alarms should be distinctive and unique. They should not be capable of being confused with any other plant system alarms.
- (d) Fire detection and actuation systems should be connected to the plant emergency power supply.

Each fire detection system for safety-related plant areas performing either fire detection only, or fire detection/actuation of an automatic suppression system is designed in accordance with Class A circuitry as defined in NFPA-72D, from the detection loop to each Fire Local Control Panel (FLCP). From each FLCP to the Master Remote Control Panel (MRCP) located in the Control Room, Class B supervised circuitry per NFPA-72D is provided. In addition, a duplicate set of alarm and trouble conditions are wired from each FLCP to the plant computer and displayed on a CRT in the Control Room. Thus, the intent of Class A design, as defined in NFPA-72D, for the entire fire detection, alarm and signaling system for the plant is achieved.

Fire detection initiating device circuits, for some areas, are arranged such that both redundant circuits are contained in a common raceway for a limited length of the raceway. These areas have been evaluated and found to be acceptable in regards to potential physical damage to the raceway.

The thermistor wire detectors provided for the charcoal filter units have Class B circuitry from the detection loop to the Fire Local Control Panel, and alarms in the Control Room on CP-19.

Fire detection systems give audible and visual alarm in the Control Room. Local audible alarms are provided.

Fire alarm signals utilize devices to produce sounds distinctive from those of other alarm systems.

E. Fire Detection and Suppression

- 1. Fire Detection
 - (a) Fire detection systems should, as a minimum, comply with NFPA 72D, "Standard for the Installation, Maintenance and Use of Proprietary Protective Signaling Systems."

(b) Fire detection system should give audible and visual alarm and annunciation in the Control Room. Local audible alarms should also sound at the location of the fire.

- (c) Fire alarms should be distinctive and unique. They should not be capable of being confused with any other plant system alarms.
- (d) Fire detection and actuation systems should be connected to the plant emergency power supply.

Each fire detection system for safety-related plant areas performing either fire detection only, or fire detection/actuation of an automatic suppression system is designed in accordance with Class A circuitry as defined in NFPA-72D, from the detection loop to each Fire Local Control Panel (FLCP). From each FLCP to the Master Remote Control Panel (MRCP) located in the Control Room, Class B supervised circuitry per NFPA-72D is provided. In addition, a duplicate set of alarm and trouble conditions are wired from each FLCP to the plant computer and displayed on a CRT in the Control Room. Thus, the intent of Class A design, as defined in NFPA-72D, for the entire fire detection, alarm and signaling system for the plant is achieved.

Fire detection initiating device circuits, for some areas, are arranged such that both redundant circuits are contained in a common raceway for a limited length of the raceway. These areas have been evaluated and found to be acceptable in regards to potential physical damage to the raceway.

The thermistor wire detectors provided for the charcoal filter units have Class B circuitry from the detection loop to the Fire Local Control Panel, and alarms in the Control Room on CP-19.

Fire detection systems give audible and visual alarm in the Control Room. Local audible alarms are provided.

Fire alarm signals utilize devices to produce sounds distinctive from those of other alarm systems.

E. Fire Detection and Suppression

- 1. Fire Detection
 - (a) Fire detection systems should, as a minimum, comply with NFPA 72D, "Standard for the Installation, Maintenance and Use of Proprietary Protective Signaling Systems."

(b) Fire detection system should give audible and visual alarm and annunciation in the Control Room. Local audible alarms should also sound at the location of the fire.

- (c) Fire alarms should be distinctive and unique. They should not be capable of being confused with any other plant system alarms.
- (d) Fire detection and actuation systems should be connected to the plant emergency power supply.

Each fire detection system for safety-related plant areas performing either fire detection only, or fire detection/actuation of an automatic suppression system is designed in accordance with Class A circuitry as defined in NFPA-72D, from the detection loop to each Fire Local Control Panel (FLCP). From each FLCP to the Master Remote Control Panel (MRCP) located in the Control Room, Class B supervised circuitry per NFPA-72D is provided. In addition, a duplicate set of alarm and trouble conditions are wired from each FLCP to the plant computer and displayed on a CRT in the Control Room. Thus, the intent of Class A design, as defined in NFPA-72D, for the entire fire detection, alarm and signaling system for the plant is achieved.

Fire detection initiating device circuits, for some areas, are arranged such that both redundant circuits are contained in a common raceway for a limited length of the raceway. These areas have been evaluated and found to be acceptable in regards to potential physical damage to the raceway.

The thermistor wire detectors provided for the charcoal filter units have Class B circuitry from the detection loop to the Fire Local Control Panel, and alarms in the Control Room on CP-19.

Fire detection systems give audible and visual alarm in the Control Room. Local audible alarms are provided.

Fire alarm signals utilize devices to produce sounds distinctive from those of other alarm systems.

- E. Fire Detection and Suppression
 - 1. Fire Detection
 - (a) Fire detection systems should, as a minimum, comply with NFPA 72D, "Standard for the Installation, Maintenance and Use of Proprietary Protective Signaling Systems."

(b) Fire detection system should give audible and visual alarm and annunciation in the Control Room. Local audible alarms should also sound at the location of the fire.

- (c) Fire alarms should be distinctive and unique. They should not be capable of being confused with any other plant system alarms.
- (d) Fire detection and actuation systems should be connected to the plant emergency power supply.

Each fire detection system for safety-related plant areas performing either fire detection only, or fire detection/actuation of an automatic suppression system is designed in accordance with Class A circuitry as defined in NFPA-72D, from the detection loop to each Fire Local Control Panel (FLCP). From each FLCP to the Master Remote Control Panel (MRCP) located in the Control Room, Class B supervised circuitry per NFPA-72D is provided. In addition, a duplicate set of alarm and trouble conditions are wired from each FLCP to the plant computer and displayed on a CRT in the Control Room. Thus, the intent of Class A design, as defined in NFPA-72D, for the entire fire detection, alarm and signaling system for the plant is achieved.

Fire detection initiating device circuits, for some areas, are arranged such that both redundant circuits are contained in a common raceway for a limited length of the raceway. These areas have been evaluated and found to be acceptable in regards to potential physical damage to the raceway.

The thermistor wire detectors provided for the charcoal filter units have Class B circuitry from the detection loop to the Fire Local Control Panel, and alarms in the Control Room on CP-19.

Fire detection systems give audible and visual alarm in the Control Room. Local audible alarms are provided.

Fire alarm signals utilize devices to produce sounds distinctive from those of other alarm systems.