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November 7, 2000

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555-0001

Subject: Duke Energy Corporation
Catawba Nuclear Station Units 1 and 2
Docket Nos. 50-413 and 50-414
Emergency Plan Implementing Procedures

Please find enclosed for NRC Staff use and review the following
Emergency Plan Implementing Procedure:

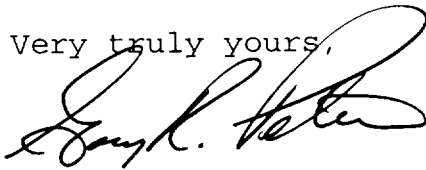
RP/0/B/5000/013, NRC Notification Requirements (Rev.026)

This revision is being submitted in accordance with 10CFR
50.54(q) and does not decrease the effectiveness of the
Emergency Plan Implementing Procedures or the Emergency Plan.

By copy of this letter, two copies of the above documents are
being provided to the NRC, Region II.

If there are any questions, please call Tom Beadle at 803-831-
4027.

Very truly yours,



Gary R. Peterson

Attachments

A045

U.S. Nuclear Regulatory Commission
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xc (w/attachments):

L. A. Reyes
U.S. Nuclear Regulatory Commission
Regional Administrator, Region II
Atlanta Federal Center
61 Forsyth St., SW, Suite 23T85
Atlanta, GA 30303

(w/o attachments):

C. P. Patel
NRC Senior Project Manager (CNS)
U.S. Nuclear Regulatory Commission
Mail Stop O-8 H12
Washington, DC 20555-0001

D. J. Roberts
Senior Resident Inspector (CNS)
U.S. Nuclear Regulatory Commission
Catawba Nuclear Site

DUKE POWER COMPANY
CATAWBA NUCLEAR STATION
EMERGENCY PLAN IMPLEMENTING PROCEDURES INDEX

VOLUME I

PROCEDURE	TITLE
RP/0/A/5000/001	Classification of Emergency (Rev. 013)
RP/0/A/5000/002	Notification of Unusual Event (Rev. 035)
RP/0/A/5000/003	Alert (Rev. 037)
RP/0/A/5000/004	Site Area Emergency (Rev. 039)
RP/0/A/5000/005	General Emergency (Rev. 039)
RP/0/A/5000/06	Deleted
RP/0/A/5000/006 A	Notifications to States and Counties from the Control Room (Rev. 012)
RP/0/A/5000/006 B	Notifications to States and Counties from the Technical Support Center (Rev. 011)
RP/0/A/5000/006 C	Deleted
RP/0/A/5000/007	Natural Disaster and Earthquake (Rev. 019)
RP/0/A/5000/08	Deleted
RP/0/B/5000/008	Spill Response (Rev. 017)
RP/0/A/5000/009	Collision/Explosion (Rev. 005)
RP/0/A/5000/010	Conducting A Site Assembly or Preparing the Site for an Evacuation (Rev. 013)
RP/0/A/5000/11	Deleted
RP/0/B/5000/12	Deleted
RP/0/B/5000/013	NRC Notification Requirements (Rev. 026)
RP/0/B/5000/14	Deleted
RP/0/A/5000/015	Core Damage Assessment (Rev. 004)
RP/0/B/5000/016	Deleted
RP/0/B/5000/17	Deleted

October 24, 2000

DUKE POWER COMPANY
CATAWBA NUCLEAR STATION
EMERGENCY PLAN IMPLEMENTING PROCEDURES INDEX

VOLUME I

PROCEDURE	TITLE
RP/0/A/5000/018	Emergency Worker Dose Extension (1/15/96)
RP/0/B/5000/019	Deleted
RP/0/A/5000/020	Technical Support Center (TSC) Activation Procedure (Rev. 013)
RP/0/A/5000/021	Deleted
RP/0/B/5000/022	Evacuation Coordinator Procedure (Rev. 003)
RP/0/B/5000/023	Deleted
RP/0/A/5000/024	OSC Activation Procedure (Rev. 007)
RP/0/B/5000/025	Recovery and Reentry Procedure (Rev. 002)
RP/0/B/5000/026	Response to Bomb Threat (Rev. 001)
RP/0/B/5000/028	Communications and Community Relations EnergyQuest Emergency Response Plan (Rev. 001)

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DUKE POWER COMPANY
CATAWBA NUCLEAR STATION
EMERGENCY PLAN IMPLEMENTING PROCEDURES INDEX

VOLUME II

PROCEDURE	TITLE
HP/0/B/1000/006	Emergency Equipment Functional Check and Inventory (Rev. 053)
HP/0/B/1009/001	Radiation Protection Recovery Plan (Rev. 007)
HP/0/B/1009/003	Radiation Protection Response Following a Primary to Secondary Leak (Rev. 008)
HP/0/B/1009/004	Environmental Monitoring for Emergency Conditions Within the Ten-Mile Radius of CNS (Rev. 027)
HP/0/B/1009/005	Personnel/Vehicle Monitoring for Emergency Conditions (Rev. 016)
HP/0/B/1009/006	Alternative Method for Determining Dose Rate Within the Reactor Building (Rev. 008)
HP/0/B/1009/007	In-Plant Particulate and Iodine Monitoring Under Accident Conditions (Rev. 018)
HP/0/B/1009/008	Contamination Control During Transportation of Contaminated Injured Individuals (Rev. 014)
HP/0/B/1009/009	Guidelines for Accident and Emergency Response (Rev. 038)
HP/0/B/1009/014	Radiation Protection Actions Following an Uncontrolled Release of Radioactive Material (Rev. 008)
HP/0/B/1009/016	Distribution of Potassium Iodide Tablets in the Event of a Radioiodine Release (Rev. 011)
HP/0/B/1009/017	Deleted
HP/1/B/1009/017	Post-Accident Containment Air Sampling System (Rev. 001)
HP/2/B/1009/017	Post-Accident Containment Air Sampling System (Rev. 000)
HP/0/B/1009/018	Deleted
HP/0/B/1009/019	Emergency Radio System Operation, Maintenance and Communication (Rev. 010)
HP/0/B/1009/024	Implementing Procedure for Estimating Food Chain Doses Under Post-Accident Conditions (Rev. 002)

October 24, 2000

DUKE POWER COMPANY
CATAWBA NUCLEAR STATION
EMERGENCY PLAN IMPLEMENTING PROCEDURES INDEX

VOLUME II

PROCEDURE	TITLE
HP/0/B/1009/025	Deleted
HP/0/B/1009/026	On-Shift Offsite Dose Projections (Rev. 002)
SH/0/B/2005/001	Emergency Response Offsite Dose Projections (Rev. 001)
SH/0/B/2005/002	Protocol for the Field Monitoring Coordinator During Emergency Conditions (Rev. 001)
OP/0/A/6200/021	Operating Procedure for Post Accident Liquid Sampling System II+ (Rev. 032)
SR/0/B/2000/001	Standard Procedure for Public Affairs Response to the Emergency Operations Facility (Rev. 002)
SR/0/B/2000/002	Standard Procedure for EOF Commodities and Facilities (Rev. 001)
SR/0/B/2000/003	Activation of the Emergency Operations Facility (Rev. 006)
SR/0/B/2000/004	Notification to States and Counties from the Emergency Operations Facility (Rev. 001)

October 24, 2000

Duke Power Company

PROCEDURE PROCESS RECORD

(1) ID No. **RP/0/B/5000/013**Revision No. 026**PREPARATION**(2) Station Catawba Nuclear Station(3) Procedure Title NRC Notification Requirements(4) Prepared By E. T. BoodleDate 10/24/00

(5) Requires 10CFR50.59 evaluation?

☒ Yes (New procedure or reissue with major changes)☐ No (Revision with minor changes)☐ No (To incorporate previously approved changes)(6) Reviewed By Garry L Mitchell (QR)Date 10/24/00Cross-Disciplinary Review By _____ (QR) NA GMDate 10/24/00Reactivity Mgmt. Review By _____ (QR) NA GMDate 10/24/00

(7) Additional Reviews

Reviewed By _____ Date _____

Reviewed By _____ Date _____

(8) Temporary Approval (if necessary)

By _____ (SRO/QR) Date _____

By _____ (QR) Date _____

(9) APPROVED BY Richard L SwingartDate 10/24/00**PERFORMANCE** (Compare with control copy at least once every 14 calendar days while work is being performed)

(10) Compared with Control Copy _____ Date _____

Compared with Control Copy _____ Date _____

Compared with Control Copy _____ Date _____

(11) Dates(s) Performed _____

Work Order Number (W/O #) _____

COMPLETION

(12) Procedure Completion Verification

☐ Yes ☐ N/A Check lists and/or blanks properly initialed, signed, dated, or filled in NA, as appropriate?☐ Yes ☐ N/A Listed enclosures attached?☐ Yes ☐ N/A Data sheets attached, completed, dated and signed?☐ Yes ☐ N/A Charts, graphs, etc. attached and properly dated, identified and marked?☐ Yes ☐ N/A Procedure requirements met?

Verified By _____ Date _____

(13) Procedure Completion Approved _____ Date _____

(14) Remarks (attach additional pages, if necessary)

Duke Power Company Catawba Nuclear Station NRC Notification Requirements Multiple Use	Procedure No.
	RP/0/B/5000/013
	Revision No. 026
	Electronic Reference No. CN005GO5

1. Symptoms

NOTE: Unless otherwise noted, the terms Tech Spec or Technical Specifications refer to both Unit 1 and Unit 2 Technical Specifications.

- 1.1 Plant conditions requiring Immediate, 1-hour, 4-hour, 24-hour **OR** 30 day NRC notification in accordance with the following:
 - 1.1.1 10CFR20.1906
 - 1.1.2 10CFR20.2202
 - 1.1.3 10CFR26.73
 - 1.1.4 10CFR50.36
 - 1.1.5 10CFR50.72
 - 1.1.6 10CFR70.52
 - 1.1.7 10CFR73.71
 - 1.1.8 Declaration of any emergency classification
 - 1.1.9 Security or Safeguards Event
- 1.2 All non-emergency notifications to the NRC (1.1.1 through 1.1.7 and 1.1.9) where no other notification is required, shall be made to the state and county emergency preparedness management agencies as courtesy notifications. EnergyQuest/On-site Public Affairs shall be notified of all "courtesy" notifications to the states and counties. (PIP 0-C00-01689)

2. Immediate Actions

- 2.1 Complete one of the following enclosures:
 - 2.1.1 Enclosure 4.8 "Safeguards ENS Event Report"
- OR**
- 2.1.2 Enclosure 4.9 "Event Notification Report"
 - 2.1.2.1 If the Event Notification Report is being completed for a non-emergency event, mark the "NOTIFICATIONS" blocks at the bottom of page 1 of 2 as "WILL BE" for both states (NC, SC) and all three counties.
 - 2.1.2.2 If the Event Notification Report is being completed for a declared emergency, mark the "NOTIFICATIONS" blocks at the bottom of page 1 of 2 as "YES" for both states (NC, SC) and all three counties.

2.2 Notify the NRC Operations Center by one of the following means:

2.2.1 **Primary:** Emergency Notification System (ENS) Phone 1-301-816-5100

OR

2.2.2 **Alternate:** Commercial Telephones:

- 1-301-816-5100
- 1-301-951-0550
- 1-301-415-0550
- 1-301-415-0553

AND

2.2.3 **Facsimile:** 1-301-816-5151

2.3 **IF** additional explanation/determination of appropriate notification requirement(s) is required, refer to:

- 2.3.1 Enclosure 4.1, "Events Requiring Immediate NRC Notification"
- 2.3.2 Enclosure 4.2, "Events Requiring 1-Hour NRC Notification"
- 2.3.3 Enclosure 4.3, "Events Requiring 4-Hour NRC Notification"
- 2.3.4 Enclosure 4.4, "Events Requiring 24-Hour NRC Notification"
- 2.3.5 Enclosure 4.5, "Events Requiring 30- Day NRC Notification"
- 2.3.6 Enclosure 4.6, "List of ESF Actuations for Catawba"
- 2.3.7 NSD 201, "Reporting Requirements"
- 2.3.8 NSD 202, "Reportability"

NOTE: Notification of state and county emergency preparedness management agencies using this procedure is a "courtesy" notification.

2.4 **IF** the NRC is being notified of a plant condition, **and** an emergency has **not** been declared, **and** there is **not** another requirement to notify the state and county emergency preparedness management agencies, then notify them and EnergyQuest by referring to Enclosure 4.7. (PIP 0-C00-01689)

3. Subsequent Actions

3.1 Maintain continuous communications with the NRC Operations Center upon request by the NRC.

NOTE: Person to person contact is required in the following step to ensure newsworthy information is consistently known and understood.

- 3.2 Notify the following individuals:
 - 3.2.1 Duty Regulatory Compliance Representative (see current station duty list)
 - 3.2.2 Duty NRC Resident Inspector (see current station duty list)
 - 3.2.3 Duty Station Manager (see current station duty list)
 - 3.2.4 Duty Safety Professional (see current duty list) for the following events:
 - 3.2.4.1 On-Site Fatality
 - 3.2.4.2 Admission of an employee to the hospital
 - 3.2.5 Duty Emergency Planner (see current duty list)
- 3.3 Forward a copy of the completed procedure to the Emergency Planning Group.
- 3.4 Forward the original signed completed procedure to Document Management.

4. Enclosures

- 4.1 Events Requiring Immediate NRC Notification
- 4.2 Events Requiring 1-Hour NRC Notification
- 4.3 Events Requiring 4-Hour NRC Notification
- 4.4 Events Requiring 24-Hour NRC Notification
- 4.5 Events Requiring 30-Day NRC Notification or 30 Day NRC Report
- 4.6 List of ESF Actuations for Catawba
- 4.7 Courtesy Notification to States and Counties of Non-emergency Plant Conditions
- 4.8 Safeguards ENS Event Report
- 4.9 Event Notification Report

Enclosure 4.1

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Events Requiring IMMEDIATE NRC Notification

Complete the reporting requirements for the following events as soon as practical after the occurrence becomes known to the licensee:

10CFR Section	Event Description	Reporting Requirement
10CFR20.1906 Transportation events involving receiving and opening packages	Events involving receiving and opening packages when removable radioactive surface contamination of the package (as determined by Radiation Protection) exceeds the limits of 10CFR71.87(i) or when external radiation levels (as determined by Radiation Protection) exceed the limits of 10CFR71.47	Notify the final delivery carrier. Notify the Region II Administrator at 1-404-562-4400. An Emergency Notification System (ENS) phone/call does not need to be made unless specified by Region II. There is not an enclosure for reporting to Region II pursuant to 10CFR20.1906(d).
10CFR20.2201a(i) Material/Exposure events involving theft or loss of stolen licensed material	Events involving any lost, stolen, or missing licensed material in an aggregate quantity equal to or greater than 1,000 times the quantity specified in Appendix C to 10CFR20.1001 - 20.2401 (as determined by Radiation Protection) under such circumstances that it appears that an exposure could result to persons in unrestricted areas.	Notify the NRC Operations Center
10CFR20.2202 Material/Exposure events involving radiological exposure	Any event involving byproduct, source, or special nuclear material that may have caused or threatens to cause an individual to receive any of the following: • A total effective dose equivalent of 25 rems or more • An eye dose equivalent of 75 rems or more • A shallow-dose equivalent to the skin or extremities of 250 rads or more • May have caused or threatens to cause the release of radioactive material, inside or outside of a restricted area, so that, had an individual been present for 24 hours, the individual could have received an intake five times the occupational annual limit on intake (does not apply to locations where personnel are not normally stationed during routine operations).	Notify the NRC Operations Center

Enclosure 4.1

Events Requiring IMMEDIATE NRC Notification

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Complete the reporting requirements for the following events as soon as practical after the occurrence becomes known to the licensee

10CFR Section	Event Description	Reporting Requirement
10CFR50.72 Emergency Classification Notifications	• Declared emergency classification as specified in RP/0/A/5000/001, "Classification of Emergency". • Change from one emergency classification to another • Termination of an emergency classification • Any further degradation in the level of safety of the plant or other worsening plant conditions, including those that require the declaration of any of the emergency classes, if such a declaration has not been previously made • The results of ensuing evaluations or assessments of plant conditions • The effectiveness of response or protective measures taken. • Information related to plant behavior that is not understood • As a courtesy in situations deemed necessary.	Notify the NRC Operations Center <u>immediately</u> after notification of the appropriate state or local agencies and not later than 1 hour after the time one of the emergency classes is declared. Activate the Emergency Response Data System (ERDS) as soon as possible but not later than one hour after declaring an Alert or higher emergency classification.

Enclosure 4.2

Events Requiring 1-HOUR NRC Notification

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Complete the reporting requirements for the following events as soon as practical and in all cases within 1 hour after the occurrence becomes known to the licensee:

10CFR Section	Event Description	Reporting Requirement
10CFR50.72(b)(1)(i)(A) Initiation of any plant shutdown required by Technical Specifications	- Initiation of a shutdown is defined as: "A reduction in power required by an Action statement of Technical Specifications to enter Mode 3." - Shutdown is defined (for reporting requirements) as: "Mode 3 and below from Mode 1 or Mode 2." - Cooldown to comply with an Action statement of Technical Specifications does not constitute "Shutdown initiation of any plant shutdown." reporting requirements. Example: If the unit is already shut down and a cooldown is required to comply with a Technical Specification ACTION statement, no further reporting requirements apply because of the cooldown	Notify the NRC Operations Center

Enclosure 4.2

Events Requiring 1-HOUR NRC Notification

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Complete the reporting requirements for the following events as soon as practical and in all cases within 1 hour after the occurrence becomes known to the licensee:

10CFR50.72(b)(1)(i)(B) TS Deviation (10CFR50.54(x) Declarations)	• Reasonable action that departs from a license condition or a technical specification may be taken in an emergency when this action is immediately needed to protect the health and safety of the public and no action consistent with the license condition or technical specification that can provide adequate or equivalent protection is immediately apparent. • Deviation from the intent of an emergency procedure <u>constitutes</u> a 10CFR50.54(x) action. • Actions taken per 10CFR50.54(x) shall be approved, as a minimum, by a Licensed Senior Reactor Operator prior to taking such action. • 10CFR50.54(x) decisions shall be documented in the Reactor Operators Logbook and the TSC Logbook. • If not reported as a declaration of an emergency classification, the NRC shall be notified as soon as practical but always within one hour of the occurrence of a 10CFR50.54(x) action. { PIP 2-C96-0273 }	Notify the NRC Operations Center
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Enclosure 4.2

Events Requiring 1-HOUR NRC Notification

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Complete the reporting requirements for the following events as soon as practical and in all cases within 1 hour after the occurrence becomes known to the licensee:

10CFR Section	Event Description	Reporting Requirement
10CFR50.72(b)(1)(ii) Plant Operation Degraded	Any event or condition <u>during operation</u> that results in the condition of the plant, including its principal safety barriers, being seriously degraded or results in the plant being in: • an unanalyzed condition significantly compromising plant safety, • a condition outside the plant's design basis, or • a condition not covered by the plant's operating and emergency procedures	Notify the NRC Operations Center
10CFR50.72(b)(1)(ii) Degraded Condition Technical Specification safety limit violation	Events involving a Technical Specification safety limit violation.	Notify the NRC Operations Center.
10CFR50.72(b)(1)(iii) Natural phenomenon or other external condition	Any natural phenomenon or other external condition that poses an actual threat to the safety of the plant or significantly hampers site personnel in the performance of duties necessary for safe plant operation. This section applies only to acts of nature (e.g., tornadoes, earthquakes, external fires, hurricanes, floods) and external hazards (e.g., industrial and transportation accidents). Events of this type include external toxic substance releases, severe weather conditions, civil disturbances, extensive fires, or major traffic accidents that could prevent the arrival of personnel on site for the purpose of shift turnover for a reasonable period of time (e.g., greater than four hours) beyond the normal turnover time.	Notify the NRC Operations Center

Enclosure 4.2

Events Requiring 1-HOUR NRC Notification

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Complete the reporting requirements for the following events as soon as practical and in all cases within 1 hour after the occurrence becomes known to the licensee:

10CFR Section	Event Description	Reporting Requirement
10CFR50.72(b)(1)(iv) ECCS discharge into the Reactor Coolant System	Any event that results or should have resulted in ECCS discharge into the reactor coolant system as a result of a valid signal • <u>Valid</u> signal refers to those signals automatically initiated by measurement of an actual physical system parameter that was within the established setpoint band of the sensor that provides the signal to the protection system logic, or manually initiated in response to plant conditions. Valid signals also include passive system actuations that occur as a function of system conditions like differential pressure (i.e., cold leg accumulators) whereby no SSPS or other electrical signal is involved. The validity of an ECCS signal may not be determined within 1 hour; ECCS signals that result or should have resulted in injections should be considered valid until firm evidence proves otherwise. • <u>Invalid</u> ECCS injections are still considered ESF actuations and therefore require a 4-hour NRC notification (unless a 1-hour notification was made per this section) and LER. (Refer to Enclosure 4.6 for guidance as to what constitutes an ESF actuation.)	Notify the NRC Operations Center

Enclosure 4.2

Events Requiring 1-HOUR NRC Notification

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Complete the reporting requirements for the following events as soon as practical and in all cases within 1 hour after the occurrence becomes known to the licensee:

10CFR Section	Event Description	Reporting Requirement
10CFR50.72(b)(1)(v) Major loss of emergency assessment capability or communications capability	Any event that results in a major loss of emergency assessment capability or communications capability (e.g., significant portion of control room indication, Emergency Notification System (ENS), Health Physics Network (HPN), unavailability of TSC or off-site notification system (i.e., loss of 22 (25%) or more of the plant's Emergency Planning Zone sirens for more than one hour) • Should either or both of the emergency communications subsystems (ENS and HPN fail, the NRC Operations Center should be so informed over normal commercial telephone lines. When notifying the NRC Operations Center, licensees should use the backup commercial telephone numbers provided. • <u>If the NRC Operations Center notifies the licensee</u> that an ENS or HPN line is inoperable, a report is not required. The Operations Center contacts the appropriate repair organization.	Notify the NRC Operations Center

Enclosure 4.2

Events Requiring 1-HOUR NRC Notification

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Complete the reporting requirements for the following events as soon as practical and in all cases within 1 hour after the occurrence becomes known to the licensee:

10CFR Section	Event Description	Reporting Requirement
10CFR50.72(b)(1)(vi) Fire, Toxic Gas Radiological Releases or any other event that poses an actual threat to plant safety or significantly hampers site personnel in the performance of duties	- This section pertains to threats internal to the station. Fires, toxic gas releases, and radioactive releases are not the only threats that may require reporting under this section. Events of this type include any abnormal conditions or occurrences on site which could prevent personnel from establishing control of shutdown systems from local stations (even if not needed) for greater than two hours. - Examples include high radiation level, steam line break, physical barrier, excessive heat, fire protection discharge, or other internal hindrance preventing access to safety related equipment or areas (e.g., inadvertent CO2 discharge in diesel generator room or steam line break within the CA pump room preventing access to the turbine control panel for an extended period of time). - The greater than two hour criterion for establishing local control of shutdown systems is based on the initiating criteria for an "Alert" condition. If the control room is unavailable <u>and</u> local controls are not able to be established in fifteen minutes, a "Site Area Emergency" should be declared. If some phenomenon in the plant prohibits use of the local shutdown controls (examples below), yet the control room is still functioning normally, an emergency condition may not exist, but notification under this section is called for. Since the control room is still available, the time period has been somewhat arbitrarily set longer than fifteen minutes and at a limit of two hours. - Examples of phenomenon in the plant that prohibits the use of the local shutdown controls include: MG set room, auxiliary shutdown panels or auxiliary feedwater pump turbine control panel, S/G PORVs in the doghouses, emergency borate valves, diesel generator rooms, standby shutdown facility, VI panel, auxiliary electric boiler panels, main turbine front standard, main feedwater pump turbine front standard, NV-188A and 189B, NV-252A and 253B, NI-9A and 10B, ETA/ETB room CPCS control cabinets, primary sample room, VC/YC local panels, and VA local panels	Notify the NRC Operations Center

Enclosure 4.2

Events Requiring 1-HOUR NRC Notification

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Complete the reporting requirements for the following events as soon as practical and in all cases within 1 hour after the occurrence becomes known to the licensee:

10CFR Section	Event Description	Reporting Requirement
10CFR70.52 Accidental criticality or loss or theft or attempted theft of special nuclear material	Events involving accidental criticality or loss or theft or attempted theft of special nuclear material - Any case of accidental criticality or any loss, other than normal operating loss, of special nuclear material - Any loss or theft or unlawful diversion of special nuclear material or any incident in which an attempt has been made or is believed to have been made to commit a theft or unlawful diversion of such material	Notify the NRC Operations Center
10CFR73.71 Physical protection of plant and materials	Events involving physical protection of plant and materials - The loss of any shipment of special nuclear material or spent fuel (also notify the NRC Operations Center within 1 hour after recovery of or accounting for such lost shipment) - Safeguards events as determined by Security personnel	Notify the NRC Operations Center. Notify the NRC Operations Center of significant supplemental information which becomes available.

Enclosure 4.3

Events Requiring 4-HOUR NRC Notification

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Complete the reporting requirements for the following events as soon as practical and in all cases within 4 hours after the occurrence becomes known to the licensee:

10CFR Section	Event Description	Reporting Requirement
10CFR50.72(b)(2)(i) Reactor is shut down	Any event found <u>while the reactor is shut down</u> , that, had it been found while the reactor was in operation, would have resulted in the plant, including its principal safety barriers, being seriously degraded or in an unanalyzed condition that significantly compromises plant safety.	Notify the NRC Operations Center
(10CFR50.72(b)(2)(ii) ESF Actuation	Any event or condition that results in manual or automatic actuation of any ESF, including the RPS. Actuation of an ESF, including the RPS, that results from and is part of a pre-planned sequence during testing or operation need not be reported. Also an actuation need not be reported if it is invalid and any of the following occur: • The actuation occurs while the system is properly removed from service • The actuation occurs after the safety function has been already completed • The actuation involves only the following specific ESFs: (a) Control Room ventilation system (b) Reactor Building ventilation system (c) Fuel Building ventilation system (d) Auxiliary Building ventilation system (Refer to Enclosure 4.6 for guidance as to what constitutes an ESF actuation.)	Notify the NRC Operations Center

Enclosure 4.3

Events Requiring 4-HOUR NRC Notification

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Complete the reporting requirements for the following events as soon as practical and in all cases within 4 hours after the occurrence becomes known to the licensee:

10CFR50.72(b)(2)(iii) Safety Function Prevented From Functioning	Any event or condition that alone could have prevented the fulfillment of the safety function of structures or systems needed to: • shut down the reactor and maintain it in a safe shutdown condition, • remove residual heat, • control the release of radioactive material, or • mitigate the consequences of an accident	Notify the NRC Operations Center
(10CFR50.72(b)(2)(iv) Airborne or Liquid Release	Any airborne radioactive release that exceeds 20 times the applicable concentration specified in Appendix B to 10CFR20.1001-20.2401, Table 2, Column 1 of Part 20 of this chapter in unrestricted areas, when averaged over a time period of 1 hour OR Any liquid effluent release that exceeds 20 times the applicable concentration specified in Appendix B to 10CFR20.1001-20.2401, Table 2, Column 2, of Part 20 of this chapter, at the point of entry into the receiving water (i.e., unrestricted area) for all radionuclides except tritium and dissolved noble gases, when averaged over a time period of 1 hour	Notify the NRC Operations Center
10CFR50.72(b)(2)(v) Offsite Medical (Contaminated Injury)	Any event requiring the transport of a radioactively contaminated person to an off-site medical facility for treatment	Notify the NRC Operations Center
10CFR50.72(b)(2)(vi) Offsite Notification (News Release)	Any event or situation, related to the health and safety of the public or on-site personnel, or protection of the environment, for which a news release is planned or notification to other government agencies has been or will be made. Such an event may include an on-site fatality or inadvertent release of radioactively contaminated materials	Notify the NRC Operations Center

Enclosure 4.3

Events Requiring 4-HOUR NRC Notification

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Complete the reporting requirements for the following events as soon as practical and in all cases within 4 hours after the occurrence becomes known to the licensee:

10CFR50.72(b)(2)(vii) Spent Fuel Storage Defect/Reduction in Effectiveness	Any instance of: • A defect in any spent fuel storage cask structure, system, or component which is important to safety or • A significant reduction in the effectiveness of any spent fuel storage cask confinement system during use of the storage cask under a general license issued under 10CFR72.210.	Notify the NRC Operations Center
S/G Tube Integrity Technical Specification	Notify the NRC of Steam Generator Tube Plugging in accordance with Technical Specifications 5.5.9, Table 5.5.2.	Notify the NRC Operations Center

Enclosure 4.4

Events Requiring 24-HOUR NRC Notification

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Complete the reporting requirements for the following events as soon as practical and in all cases within 24 hours after the occurrence becomes known to the licensee:

10CFR Section	Event Description	Reporting Requirement
10CFR20.2202 Radiological Exposure	Any event involving loss of control of licensed material that may have caused, or threatens to cause an individual to receive, in a period of 24 hours • A total effective dose equivalent exceeding 5 rems, or • An eye dose equivalent exceeding 15 rems, or • A shallow-dose equivalent to the skin or extremities exceeding 50 rems Or that may have caused, or threatens to cause the release of radioactive material, inside or outside of a restricted area, so that, had an individual been present for 24 hours, the individual could have received an intake in excess of one occupational annual limit on intake (does not apply to locations where personnel are not normally stationed during routine operations).	Notify the NRC Operations Center

Enclosure 4.4

Events Requiring 24-HOUR NRC Notification

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Complete the reporting requirements for the following events as soon as practical and in all cases within 24 hours after the occurrence becomes known to the licensee:

10CFR26.73 Fitness For Duty	Significant Fitness For Duty events including: • Sale, use, or possession of illegal drugs within the protected area and • Any acts by any person licensed under 10CFR55 to operate a power reactor or by any supervisory personnel assigned to perform duties within the scope of this Part • Involving the sale, use, or possession of a controlled substance, • Resulting in confirmed positive tests on such persons, • Involving use of alcohol within the protected area, or • Resulting in a determination of unfitness for scheduled work due to the consumption of alcohol	Notify the NRC Operations Center
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Enclosure 4.4

Events Requiring 24-HOUR NRC Notification

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Complete the reporting requirements for the following events as soon as practical and in all cases within 24 hours after the occurrence becomes known to the licensee:

Operating License Condition Deviations	Operating license condition deviations requiring a 24-hour report • Catawba must implement and maintain in effect all provisions of the approved fire protection program as described in the UFSAR and the SLC's. Violations of this program are potentially reportable as a 24-hour notification. Regulatory Compliance should always be notified concerning potentially reportable fire protection events. • Duke Power Company, Catawba Nuclear Site, is authorized to operate the facility at reactor core power levels not in excess of 3411 megawatts thermal (100% power) in accordance with the conditions specified in the License. Exceeding actual 100% power level is potentially a 24-hour notification as required by the Facility Operating License. Regulatory Compliance should be consulted to help determine the reportability when power level exceeds 100%.	Notify the NRC Operations Center
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Enclosure 4.5

Events Requiring 30 DAY NRC NOTIFICATION OR 30 DAY NRC REPORT

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Complete the reporting requirements for the following events as soon as practical and in all cases within 30 days after the occurrence becomes known to the licensee:

10CFR Section	Event Description	Reporting Requirement
10CFR20.2201 Theft, Loss or Missing Licensed Material	All licensed material in a quantity greater than ten times the quantity specified in Appendix C to 10CFR20.1001 - 20.2401 (as determined by Radiation Protection) that is still missing at this time	Notify the NRC Operations Center via the Emergency Notification System
Licensee Event Report (LER)	Any event which requires the preparation of a Licensee Event Report (the event may or may not be reportable under 10CFR50.72).	Notify the Duty Regulatory Compliance Engineer The Shift Work Manager shall ensure a Problem Investigation Process (PIP) report for a more significant event (MSE) is generated and forwarded to the Safety Review Group to accurately reflect the condition. LER submitted to NRC.

Enclosure 4.6
List of ESF Actuations for Catawba

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1. Any reactor trip (P-4)
2. Safety injection (UFSAR 6.3.1, 6.3.2)
 - A. NV charging path
 - B. NI charging path
 - C. ND charging path
 - D. CLA injection
 - E. D/G sequencer activation
 - F. Reactor trip signal
 - G. FWST - containment sump ND suction swap
 - If a second NV pump is manually started in order to maintain NC inventory, this is also an ESF actuation.
3. Containment spray (UFSAR 6.2.2)
 - A. NS pump start/valve alignment
 - B. Actual spraydown of containment
4. Containment isolation (UFSAR 6.2.4)
 - A. Phase A (St)
 - B. Phase B (Sp)
 - C. An ESF actuation on containment air release and addition system (VQ) is reportable when:
 - (i) Closure of the VQ valves is caused by a safety injection signal, manual phase A, or manual phase B, and the VQ system is operating in either the containment purge or addition mode. (This is regardless of whether the signal is actual or spurious.)
 - (ii) Closure of the VQ valves as a result of a high radiation signal from EMF-38, 39, or 40 to terminate the release (when the VQ system is in the normal operating mode, purging containment air through the unit vent to the atmosphere) does not constitute an ESF actuation.
 - D. Closure of the VP valves upon receipt of a high radiation signal from EMF-38, 39, or 40 does not constitute a reportable ESF actuation during any mode.
 - E. NW system injection
5. Steam line isolation (UFSAR 10.3.2)

List of ESF Actuations for Catawba

- A. Individual steam line valve closure*
 - B. System isolation
 - C. Actuation of P-12 to close steam dumps is **NOT** an ESF actuation
6. Feedwater isolation (UFSAR 10.4.7.2)
- A. Main feedwater control valve closure*
 - B. Main feedwater control bypass valve closure*
 - C. Main feedwater containment isolation valve closure*
 - D. Main feedwater containment bypass valve closure*
 - E. Auxiliary feedwater tempering valve closure*
7. Turbine trip (UFSAR 10.2.1) caused by:
- A. Manual actuation (required because of b - e and no automatic trip)
 - B. Safety injection signal
 - C. S/G hi hi water level (P-14)
 - D. Reactor trip (P-4)
 - E. Trip of both main feedwater pumps
8. Auxiliary feedwater system
- A. Auxiliary feedwater pump start, automatic or manual, unless the start was the expected result of a controlled (documented) test or procedure.

Example: A feedwater transient is in progress with S/G levels decreasing toward the reactor trip setpoint. If the operator starts a CA pump(s) to supplement CF flow and prevent the trip, the start is reportable under the 4-hour NRC notification criterion.
 - B. Pump suction swap to RN
9. Loss of power (UFSAR 8.3.1.1.2)
- A. Actuation of undervoltage relays on loss of voltage to essential busses
 - B. Actuation of undervoltage relays on grid degraded voltage
 - C. D/G sequencer activation

List of ESF Actuations for Catawba

10. Control room area ventilation (VC) operation (UFSAR 9.4.1)
 - A. Simultaneous operation of A and B trains. The only ESF function of the VC system is for the non-operating train of VC to start up upon receipt of a safety injection signal or a blackout signal.
 - B. The actuation of EMF-43A/B, chlorine or smoke detectors closing the VC intakes does not constitute an ESF actuation.
11. Containment air return and hydrogen skimmer (VX) operation (UFSAR 6.2.5.2)
 - A. Any unanticipated system operation
12. Annulus ventilation (VE) operation (UFSAR 9.4.9, 6.2.3)
 - A. Any unanticipated system operation
13. Auxiliary building filtered ventilation exhaust (VA) operation (UFSAR 9.4.3.1)
 - A. Filtered mode of operation in conjunction with isolation of all auxiliary building areas, except ECCS pump rooms

The operation of VA in the filtered mode constitutes an ESF actuation only when initiated by receipt of a LOCA signal from the SSPS whereby the isolation dampers close, shutting off the air flow from all areas of the Auxiliary Building except for the rooms which contain ECCS safety-related pumps.

Transfer of the VA System from the unfiltered mode to the filtered mode of operations (via EMF-41) does not constitute an ESF actuation.
14. Ice condenser lower inlet door opening as a result of unplanned mass or energy release into containment
 - A. Door openings resulting from planned evolutions such as containment ventilation fan starts, personnel entries into containment, etc., do not constitute ESF actuations.

NOTE: Items 15, 16, and 17 (Hydrogen Mitigation System) can only be manually initiated.
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15. Hydrogen Recombiners (UFSAR 6.2.5)
16. Hydrogen Purge (UFSAR 6.2.5)
17. Hydrogen Igniters (UFSAR 6.2.5)

* Individual component activation due to component failure not reportable per this requirement

**Courtesy Notification to States and Counties
for a Non-emergency Plant Event**

- NOTES:** 1. This enclosure provides instruction for notifying state and county emergency preparedness management agencies (primary WP/EOCs) and EnergyQuest of **non-emergency** plant events by faxing the Event Notification Report (Enclosure 4.9) to each agency and verifying its receipt with a follow-up phone call. (PIP 0-C00-01689)
2. Step 1 sends a group fax and step 2 sends the fax to agencies individually.

1. Notification by Group Fax

- 1.1 Notify the states and county agencies (primary WP/EOCs) of a **non-emergency** plant event(s) with the completed Event Notification Report (Enclosure 4.9) used to notify the NRC, as follows:

NOTE: Performing steps 1.1.1 through 1.1.3 sends the Event Notification Report (Enclosure 4.9) to multiple locations in sequence.

- 1.1.1 Place both pages of the completed Report (Enclosure 4.9) face down into the fax machine.
- 1.1.2 Press the pre-programmed one-touch speed dial pushbutton for each of the of the following agencies:
- ☐ York Co WP/EOC
 - ☐ Gaston Co. WP/EOC
 - ☐ Meck Co. WP
 - ☐ NC WP/EOC
 - ☐ SC WP/EOC
 - ☐ EnergyQuest
- 1.1.3 Press START
- 1.2 Verify by one of the following means that the Report (Enclosure 4.9) was received by each of the agencies:
- ☐ Selective Signal (Enclosure 1.5, Emergency Response Telephone Directory)
 - ☐ Duke or Commercial Telephone (Enclosures 1.12 – 1.16, Emergency Response Telephone Directory)
- 1.3 Notify EnergyQuest duty person of courtesy notification fax transmittal (Enclosure 1.20, Emergency Response Telephone Directory).
- 1.4 **IF** any agency did not receive the group fax, then make the courtesy notification to the agency(s) by performing step 2.

**Courtesy Notification to States and Counties
for a Non-emergency Plant Event**

1.5 Fax a copy of Enclosure 4.9 to Emergency Planning at 831-3151.

1.6 Report any communications equipment failures to the duty Emergency Planner.

2. Notification by Individual Fax

2.1 Notify the states and county agencies (primary WP/EOCs) of a **non-emergency** plant event(s) with the completed Event Notification Report (Encl 4.9) used to notify the NRC, as follows:

NOTE: Performing steps 2.1.1 through 2.1.3 sends the Event Notification Report (Enclosure 4.9) to individual agencies one at a time.

2.1.1 Place both pages of the completed Report (Enclosure 4.9) face down into the fax machine.

NOTE: SC WP/EOC and EnergyQuest list two fax numbers. Use the fax number for sending Emergency Notifications.

2.1.2 Enter the individual fax phone number (Enclosures 1.12 through 1.16 in the Emergency Response Phone Book) for the desired individual agency (WP/EOC). EnergyQuest fax number is listed in Enclosure 1.19, Emergency Response Telephone Directory.

2.1.3 Press START.

2.1.4 Repeat steps 2.1.1 through 2.1.3 until all of the desired agencies have been faxed the Report (Enclosure 4.9).

2.2 Verify by one of the following means that the faxed Report (Enclosure 4.9) was received by the agency(s):

☐ Selective Signal (Encl 1.5, Emergency Response Telephone Directory)

☐ Duke or Commercial Telephone (Enclosures 1.12 – 1.16, Emergency Response Telephone Directory)

2.3 Notify EnergyQuest/On-site Public Affairs duty person of courtesy notification fax transmittal (Enclosure 1.20, Emergency Response Telephone Directory).

2.4 Fax a copy of Enclosure 4.9 to Emergency Planning at 831-3151.

2.5 Report any communications equipment failures to the duty Emergency Planner.

Enclosure 4.8
Safeguards ENS Event Report

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Date/Time of Notification _____

NRC Person Notified _____

State the following to the NRC Operations Center:

"This notification is made in accordance with 10CFR73.71. This is Duke Power Company's Catawba Nuclear Station in NRC Region II making the notification. "

My Name is: _____ My title is: _____

I can be reached at _____

"Your Name Please" _____

1. *Date of occurrence: _____

2. *Time of occurrence: _____

3. *Power level of units:

Unit 1 _____ Unit 2 _____

*If date and time of occurrence are not known, indicate the date and time of discovery.

4. Description of event: _____

5. Security response/compensatory measures established:

6. LLEA (Local Law Enforcement Agency) Notified? YES ____ NO ____

(If yes, name of organization and telephone number) _____

Enclosure 4.8
Safeguards ENS Event Report

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7. NRC Region II notified? YES ____ NO ____

(If yes, name of person notified) _____

8. Who to contact for more information:

9. Consequences at plant:

Description of Equipment Systems Affected _____

NOTE: After verbal transmission of this Enclosure, a copy should be sent by FAX to: NRC Operations Center - 1-301-816-5151
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APPROVED BY: _____ **TIME/DATE:** _____
OPERATIONS SHIFT MANAGER OR EMERGENCY COORDINATOR

Enclosure 4.9
Event Notification Report

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STATE: "THIS IS THE CATAWBA NUCLEAR SITE IN NRC REGION 2 MAKING AN EVENT NOTIFICATION REPORT"					
NOTIFICATION TIME/DATE		UNIT	CALLER'S NAME	CALLBACK TELEPHONE #: ENS 1-803-831-3920 or 1-803-831-2674	NRC OPERATIONS OFFICER CONTACTED NRC Report Number: _____
EVENT TIME & ZONE _____ (time) Region II (zone)		EVENT DATE	POWER/MODE BEFORE		POWER/MODE AFTER
EVENT CLASSIFICATIONS		1-HR NON-EMERGENCY 10CFR5072(b)(1)		4-HR NON-EMERGENCY 10CFR50.72(b)(2)	
GENERAL EMERGENCY		(i)(A) TS Required S/D		(i) -Degrade While S/D	
SITE AREA EMERGENCY		(i)(B) TS Deviation		(ii) RPS Actuation (scram)	
ALERT		(ii) Degraded Condition		(ii) ESF Actuation	
UNUSUAL EVENT		(ii)(A) Unanalyzed Condition		(iii)(A) Safe S/D Capability	
50.72 NON-EMERGENCY (see next columns)		(ii)(B) Outside Design Basis		(iii)(B) RHR Capability	
PHYSICAL SECURITY (73.71)		(ii)(C) Not Covered by OPs/EPs		(iii)(C) Control of Rad Release	
TRANSPORTATION (10 CFR 20)		(iii) Earthquake		(iii)(D) Accident Mitigation	
MATERIAL/EXPOSURE (10 CFR 20)		(iii) Flood		(iv)(A) Air Release > 20X App B	
OTHER		(iii) Hurricane		(iv)(B) Liq Release > 20X App B	
		(iii) Ice/Hail		(v) Offsite Medical	
		(iii) Lightning		(vi) Offsite Notification	
		(iii) Tornado			
		(iii) Other Natural Phenomenon		24 HOUR NON EMERGENCY	
		(iv) ECCS Discharge to RCS		Radiological Exposure 10CFR20.2202	
		(v) Lost ENS		Fitness For Duty 10CFR26.73	
		(v) Lost Emergency Assessment		Operating License Deviation	
		(v) Lost Offsite Comms.			
		(v) Emergency Siren Inoperable			
		(vi) Fire			
		(vi) Toxic Gas			
		(vi) Rad Releases			
		(vi) Other Hampering Safe Operation			
EVENT DESCRIPTION (Include: Systems affected, actuations & their initiating signals, causes, effect of event on plant, actions taken or planned, PARs etc.)					
CATEGORY		INITIATION SIGNAL			
____ REACTOR TRIP		_____			
____ ESF ACTUATION		_____			
____ ECCS ACTUATION		_____			
____ SI FLOW		_____			
____ LCO		_____			
SYSTEM _____					
COMPONENT _____					
CAUSE: ____ MECHANICAL ____ ELECTRICAL					
____ PERSONNEL ERROR ____ OTHER					
Continue on Enclosure 4.9 page 2 of 2 if necessary.					
NOTIFICATIONS	YES	NO	WILL BE	ANYTHING UNUSUAL OR NOT UNDERSTOOD? ☐ YES ☐ NO (Explain above)	
NRC RESIDENT					
STATE(s) NC SC				DID ALL SYSTEMS FUNCTION AS REQUIRED? ☐ YES ☐ NO (Explain above)	
LOCAL York County Gaston County Mecklenburg County OTHER GOV AGENCIES				MODE OF OPERATION UNTIL CORRECTED:	ESTIMATED RESTART DATE
MEDIA/PRESS RELEASE					

Event Notification Report

RADIOLOGICAL RELEASES: CHECK OR FILL IN APPLICABLE ITEMS (specific details/explanations should be covered in event description)						
☐ LIQUID RELEASE	☐ GASEOUS RELEASE	☐ UNPLANNED RELEASE	☐ PLANNED RELEASE	☐ ONGOING	☐ TERMINATED	
☐ MONITORED	☐ UNMONITORED	☐ OFFSITE RELEASE	☐ T.S. EXCEEDED	☐ RM ALARMS	☐ AREAS EVACUATED	
☐ PERSONNEL EXPOSED OR CONTAMINATED		☐ OFFSITE PROTECTIVE ACTIONS RECOMMENDED			State release path in description	

NOTE: Contact Radiation Protection Shift to obtain the following release information.
 IF the notification is due and the information is not available, mark "Not Available" and complete the notification.

	Releases Rate (Ci/sec)	% T.S. LIMIT	HOO GUIDE	Total Activity (Ci)	% T.S. LIMIT	HOO GUIDE
Noble Gas			0.1 Ci/sec			1000 Ci
Iodine			10 uCi/sec			0.01 Ci
Particulate			1 uCi/sec			1 mCi
Liquid (excluding tritium & dissolved noble gases)			10 uCi/min			0.1 Ci
Liquid (tritium)			0.2 Ci/min			5 Ci
Total Activity						

CIRCLE RAD MONITORS IN ALARM	PLANT STACK (EMF 35, 36, 37)	CONDENSER/AIR EJECTOR (EMF 33)	MAIN STEAM LINE (UNIT 1-EMF 26,27,28,29 UNIT 2-EMF 10, 11, 12,13)	SG BLOWDOWN (EMF 34)	OTHER
RAD MONITOR READINGS					
ALARM SETPOINTS: TRIP II					
% T.S. LIMIT (If applicable)		NOT APPLICABLE		NOT APPLICABLE	

RCS OR SG TUBE LEAKS: CHECK OR FILL IN APPLICABLE ITEMS (specific details/explanations should be covered in event description)

LOCATION OF THE LEAK (e.g. SG#, valve, pipe, etc.):

LEAK RATE: gpm/gpd	T.S. LIMITS EXCEEDED:	SUDDEN OR LONG TERM DEVELOPMENT:
LEAK START DATE: _____ TIME _____		COOLANT ACTIVITY (Last Sample): PRIMARY SECONDARY-
		Xe eq _____ mci/mi Xe eq _____ mci/mi
		I eq. _____ mci/mi I eq. _____ mci/mi

LIST OF SAFETY RELATED EQUIPMENT NOT OPERATIONAL:

EVENT DESCRIPTION (Continued from Enclosure 4.9 Page 1 of 2)

ADDITIONAL INFORMATION MAY BE ATTACHED.

APPROVED BY: _____ TIME/DATE: _____ / /
 Operations Shift Manager/Emergency Coordinator (eastern) mm dd yy