DUKE ENERGY CORPORATION
Catawba Nuclear Station
4800 Concord Rd.
York, SC 29745

November 29, 2011

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

Subject: Duke Energy Carolinas, LLC
Catawba Nuclear Station, Unit 1 and Unit 2
Docket Nos. 50-413 and 50-414
UFSAR/Selected Licensee Commitment Changes

Pursuant to 10CFR 50.71(e), please find attached changes to the Catawba Nuclear Station Selected Licensee Commitments Manual. This document constitutes Chapter 16 of the Updated Final Safety Analysis Report (UFSAR).

Any questions regarding this information should be directed to Larry Rudy, Regulatory Compliance, at (803) 701-3084.

I certify that I am a duly authorized officer of Duke Energy Carolinas, LLC, and that the information contained herein accurately represents changes made to Chapter 16 of the UFSAR since the previous submittal.

James R. Morris

Attachment

A053
NRR

xc: V. M. McCree, Regional Administrator
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DUKE ENERGY CORPORATION
Catawba Nuclear Station
4800 Concord Rd.
York, SC 29745

November 22, 2011

Re: Catawba Nuclear Station
Selected Licensee Commitments Manual
Revision Date: 10/24/11

Attached are revisions to the Catawba Nuclear Station Selected Licensee Commitments Manual. Please remove and replace the following pages:

REMOVE THESE PAGES	INSERT THESE PAGES
LIST OF EFFECTIVE SECTIONS	
Pages 1 through 4 Revision 47	Pages 1 through 4 Revision 48
TAB 16.9	
SLC 16.9-1 Revision 6	SLC 16.9-1 Revision 7
SLC 16.9-2 Revision 4	SLC 16.9-2 Revision 5
SLC 16.9-23 Revision 3	SLC 16.9-23 Revision 4
TAB 16.11	
SLC 16.11-16 Revision 0	SLC 16.11-16 Revision 1

If you have any questions concerning the contents of this package update, contact Kristi Byers at (803)701-3758.

Randy Hart
Manager, Regulatory Compliance

Attachment

LIST OF EFFECTIVE SECTIONS

SECTION	REVISION NUMBER	REVISION DATE
TABLE OF CONTENTS	12	06/08/09
16.1	1	08/27/08
16.2	2	08/21/09
16.3	1	08/21/09
16.5-1	1	10/24/06
16.5-2	Deleted	
16.5-3	1	02/20/04
16.5-4	0	10/09/02
16.5-5	1	01/28/10
16.5-6	1	08/21/09
16.5-7	0	10/09/02
16.5-8	2	12/22/08
16.5-9	0	10/24/06
16.5-10	Deleted	
16.6-1	0	10/09/02
16.6-2	Deleted	
16.6-3	1	08/21/09
16.6-4	1	08/21/09
16.6-5	1	08/21/09
16.7-1	1	08/21/09
16.7-2	4	02/03/11
16.7-3	2	02/03/11
16.7-4	2	08/21/09
16.7-5	2	08/21/09

SECTION	REVISION NUMBER	REVISION DATE
16.7-6	2	08/21/09
16.7-7	1	08/21/09
16.7-8	2	08/21/09
16.7-9	5	08/21/09
16.7-10	3	11/23/09
16.7-11	1	08/21/09
16.7-12	1	08/21/09
16.7-13	2	08/21/09
16.7-14	1	08/21/09
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16.7-16	0	06/08/09
16.8-1	3	08/21/09
16.8-2	1	10/24/06
16.8-3	1	10/24/06
16.8-4	2	11/05/07
16.8-5	3	08/21/09
16.9-1	7	10/24/11
16.9-2	5	10/24/11
16.9-3	3	02/03/11
16.9-4	3	08/21/09
16.9-5	6	06/23/10
16.9-6	7	08/21/09
16.9-7	4	08/21/09
16.9-8	5	08/21/09

LIST OF EFFECTIVE SECTIONS

SECTION	REVISION NUMBER	REVISION DATE
16.9-9	3	08/21/09
16.9-10	5	08/21/09
16.9-11	3	08/21/09
16.9-12	2	08/21/09
16.9-13	3	08/21/09
16.9-14	1	09/25/06
16.9-15	2	08/21/09
16.9-16	2	08/21/09
16.9-17	0	10/09/02
16.9-18	0	10/09/02
16.9-19	2	08/21/09
16.9-20	0	10/09/02
16.9-21	0	10/09/02
16.9-22	1	08/21/09
16.9-23	4	10/24/11
16.9-24	2	10/24/06
16.9-25	2	08/21/09
16.10-1	1	08/21/09
16.10-2	1	10/24/06
16.10-3	1	08/21/09
16.11-1	0	10/09/02
16.11-2	3	06/23/10
16.11-3	0	10/09/02
16.11-4	1	08/21/09

LIST OF EFFECTIVE SECTIONS

SECTION	REVISION NUMBER	REVISION DATE
16.11-5	0	10/09/02
16.11-6	1	06/08/09
16.11-7	5	06/23/10
16.11-8	0	10/09/02
16.11-9	0	10/09/02
16.11-10	1	08/21/09
16.11-11	1	03/20/03
16.11-12	0	10/09/02
16.11-13	0	10/09/02
16.11-14	0	10/09/02
16.11-15	0	10/09/02
16.11-16	1	10/24/11
16.11-17	0	10/09/02
16.11-18	1	08/21/09
16.11-19	0	10/09/02
16.11-20	1	08/21/09
16.11-21	0	10/09/02
16.12-1	0	10/09/02
16.13-1	0	10/09/02
16.13-2	Deleted	
16.13-3	Deleted	
16.13-4	0	10/09/02

16.9 AUXILIARY SYSTEMS

16.9-1 Fire Suppression Water System

COMMITMENT The Fire Suppression Water System shall be FUNCTIONAL with:

a. At least two fire suppression pumps, each with a capacity of 2500 gpm, with their discharge aligned to the fire suppression header, and

b. A FUNCTIONAL flow path capable of taking suction from Lake Wylie and transferring the water through distribution piping with FUNCTIONAL sectionalizing valves and isolation valves for each sprinkler system, hose standpipe, or fire hydrant required to be FUNCTIONAL per SLCs 16.9-2, 16.9-4, and 16.9-23.

APPLICABILITY: At all times.

REMEDIAL ACTIONS

CONDITION		REQUIRED ACTION		COMPLETION TIME
A.	One required pump and/or associated water supply non-functional.	A.1	Restore non-functional equipment to FUNCTIONAL status.	7 days
		OR		
		A.2	Provide alternate backup pump or supply.	7 days
B.	Automatic starting function for all required pumps non-functional.	B.1	Place at least one pump in continuous operation.	Immediately
		AND		
		B.2	Restore non-functional equipment to FUNCTIONAL status.	7 days
C.	Sectionalizing or isolation valve non-functional.	C.1	Evaluate impact on downstream fire suppression features (sprinkler system, hose standpipe, or fire hydrant) and enter SLCs 16.9-2, 16.9-4, and 16.9-23 as necessary.	24 hours
		AND		
		C.2	Implement necessary administrative controls to ensure a FUNCTIONAL flow path is maintained.	24 hours
D.	Fire Suppression Water System non-functional for reasons other than Condition A, B, or C.	D.1	Establish backup Fire Suppression Water System.	24 hours

TESTING REQUIREMENTS

	TEST	FREQUENCY
TR 16.9-1-1	Start each electric motor-driven pump and operate it for ≥ 15 minutes on recirculation flow.	20 days on a STAGGERED TEST BASIS
TR 16.9-1-2	Verify that each manual, power operated, or automatic valve in the flow path, which is accessible during plant operation, is in the correct position.	In accordance with performance based criteria in BASES
TR 16.9-1-3	Perform a system flush of the outside distribution loop and verify no flow blockage by fully opening the hydraulically most remote hydrant.	6 months
TR 16.9-1-4	----------NOTE---------- Not applicable to valves RF389B, RF447B, and RF457B. ---------- Cycle each testable valve in the flow path through at least one complete cycle of full travel.	12 months
TR 16.9-1-5	Verify that each manual, power operated, or automatic valve in the flow path, which is inaccessible during plant operation, is in the correct position.	18 months
TR 16.9-1-6	Perform a system functional test, including simulated automatic actuation of the system throughout its operating sequence, and: a. Verify that each fire suppression pump starts within 10 psig of its intended starting pressure (A pump, primary switch – 95 psig; B pump, primary switch – 90 psig; and C pump, primary switch – 85 psig); and b. Verify that each pump develops ≥ 2500 gpm at a net pressure ≥ 144 psig by testing at three points on the pump performance curve.	18 months

(continued)

TESTING REQUIREMENTS (continued)

	TEST	FREQUENCY
TR 16.9-1-7	Cycle each valve in the flow path which is not testable during plant operation through at least one complete cycle of full travel.	18 months
TR 16.9-1-8	Perform a system flow test in accordance with Chapter 8, Section 16 of the National Fire Protection Association Fire Protection Handbook, 15th Edition.	3 years

BASES

The FUNCTIONALITY of the Fire Suppression Systems ensures that adequate fire suppression capability is available to confine and extinguish fires occurring in any portion of the facility where safety related equipment is located. The Fire Suppression System consists of the water supply/distribution system, sprinkler systems, fire hose stations, fire hydrants, and CO_2 systems. The collective capability of the Fire Suppression Systems is adequate to minimize potential damage to safety related equipment and is a major element in the facility Fire Protection Program.

The intent of COMMITMENT b. is to ensure a FUNCTIONAL flow path from the water source (in this case Lake Wylie), through FUNCTIONAL pumps as required in COMMITMENT a., and through the main header distribution piping – up to and including the branch lines for each sprinkler system, hose standpipe, or fire hydrant required to be FUNCTIONAL per SLCs 16.9-2, 16.9-4, and 16.9-23. When a sectionalizing valve or an isolation valve becomes non-functional, then the fire suppression features (sprinkler system, hose standpipe, or fire hydrant) affected must be evaluated and the applicable SLCs entered (16.9-2, 16.9-4, and 16.9-23). Condition C of this SLC would only apply if a non-functional sectionalizing valve(s) or isolation valve(s) rendered the entire main distribution piping non-functional.

The intent of TR 16.9-1-4 and TR 16.9-1-7 is to ensure the sectionalizing valve (main header valve used to isolate sections of the header) or isolation valve (branch line valve used to isolate specific fire suppression features (sprinkler system, hose standpipe, or fire hydrant)) is operating properly and can be used to achieve isolation when called upon. If a sectionalizing or isolation valve cannot be cycled but is in the correct position ensuring a FUNCTIONAL flow path (fully open) as required by COMMITMENT b., then the associated feature (sprinkler system, hose standpipe, or fire hydrant) can be considered FUNCTIONAL. If a sectionalizing or isolation valve cannot be cycled and is in the incorrect

BASES (continued)

position, or its position cannot be determined, thereby not ensuring a FUNCTIONAL flow path (not fully open) as required by COMMITMENT b., then the affected fire suppression feature (sprinkler system, hose standpipe, or fire hydrant) must be evaluated and the applicable SLCs entered (16.9-2, 16.9-4, and 16.9-23). If a sectionalizing valve in a loop header (i.e., flow path from two directions) cannot be cycled and it cannot be verified as fully open, then administrative controls may need to be implemented to ensure the available flow path is not isolated.

The ability to demonstrate that the valves in the RF/RY flow path can be cycled is critical to maintaining the system properly. The containment isolation valves (RF389B and RF447B) and the annulus sprinkler system isolation valve (RF457B) are required to be cycled or stroked in accordance with the Catawba Inservice Testing Program. Therefore, credit can be taken for cycling these valves under the IWV program, and they do not need to be cycled annually to meet the SLC criteria.

The proper positioning of RF/RY valves is critical to delivering fire suppression water at the fire source as quickly as possible. The option of increasing or decreasing the frequency of valve position verification allows the ability to optimize plant operational resources. Should an adverse trend develop with RF/RY valve positions, the frequency of verification shall be increased. Similarly, if the RF/RY valve position trends are positive, the frequency of verification could be decreased. Through programmed trending of RF/RY as found valve positions, the RF/RY System will be maintained at predetermined reliability standards. The Fire Protection Engineer is responsible for trending and determining verification frequencies based on the following:

Initially the frequency shall be monthly.

Annually review the results of the completed valve position verification procedures.

- If the results demonstrate that the valves are found in the correct position at least 99% of the time, the frequency of conducting the valve position verification may be decreased from monthly to quarterly or quarterly to semiannually or semiannually to annually as applicable. The frequency shall not be extended beyond annually (plus grace period).

- If the results demonstrate that the valves are not found in the correct position at least 99% of the time, the frequency of conducting the valve position verification shall be increased from annually to semiannually or semiannually to quarterly or quarterly to monthly as applicable. The valve position verification need not be conducted more often than monthly.

BASES (continued)

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

In the event the Fire Suppression Water System becomes non-functional, immediate corrective measures must be taken since this system provides the major fire suppression capability of the plant.

Since the requirement for fire suppression pump automatic starting functions is intended to provide a high level of system standby readiness, loss of a primary pressure switch renders its associated main fire pump non-functional. If the primary pressure switch for one of the two required pumps is non-functional, its associated pump is non-functional if not placed in continuous operation and Condition A applies. If both primary pressure switches for the required pumps are non-functional, it is acceptable to place at least one of the two required pumps in continuous operation and restore FUNCTIONALITY within 7 days, which is essentially meeting the requirements of Condition A (one of the two required pumps non-functional).

This SLC is part of the Catawba Fire Protection Program and therefore subject to the provisions of the Catawba Facility Operating License Conditions #8 for NPF-35 and #6 for NPF-52.

REFERENCES

1. Catawba UFSAR, Section 9.5.1.

2. Catawba SER, Section 9.5.1, including Supplements 2, 3, 4, and 5.

3. Catawba Plant Design Basis Specification for Fire Protection, CNS-1465.00-00-0006, as revised.

4. Catawba UFSAR, Section 18.2.8.

5. Catawba License Renewal Commitments, CNS-1274.00-00-0016, Section 4.12.1.

16.9 AUXILIARY SYSTEMS

16.9-2 Sprinkler Systems

COMMITMENT Sprinkler Systems in Table 16.9-2-1 shall be FUNCTIONAL.

APPLICABILITY: Whenever equipment protected by the Sprinkler System is required to be OPERABLE.

REMEDIAL ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more required Sprinkler Systems non-functional.	A.1 Establish a continuous fire watch or an hourly fire watch in accordance with the Fire Watch Code of Table 16.9-2-1.	1 hour
	AND	
	A.2.1 Verify backup fire suppression (fire extinguisher, nearby fire hose station) is available.	1 hour
	OR	
	A.2.2 Establish backup fire suppression equipment for the affected area.	1 hour

TESTING REQUIREMENTS

TEST		FREQUENCY
TR 16.9-2-1	Verify that each manual or power operated valve in the flow path, which is accessible during plant operation, is in the correct position.	In accordance with performance based criteria in BASES

(continued)

TESTING REQUIREMENTS (continued)

	TEST	FREQUENCY
TR 16.9-2-2	----------NOTE---------- Not applicable to valves RF389B, RF447B, and RF457B. ---------- Cycle each testable valve in the flow path through at least one complete cycle of full travel.	12 months
TR 16.9-2-3	Verify that each manual or power operated valve in the flow path, which is inaccessible during plant operation, is in the correct position.	18 months
TR 16.9-2-4	Perform a system functional test by performing an inspector's test connection flow test.	18 months
TR 16.9-2-5	Cycle each valve in the flow path which is not testable during plant operation through at least one complete cycle of full travel.	18 months
TR 16.9-2-6	Visually inspect each Sprinkler System starting at the system isolation valve to verify the system's integrity.	18 months
TR 16.9-2-7	Visually inspect each nozzle's spray area to verify the spray pattern is not obstructed.	18 months

Table 16.9-2-1 (page 1 of 2)

Sprinkler Systems

	ROOM NUMBER	EQUIPMENT	FIRE WATCH CODE
a.	Elevation 522+0	Auxiliary Building	
	100, 101, 106, 111, 112	ND & NS connecting corridor	2
	104	ND pump 1B	3
	105	ND pump 1A	3
	109	ND pump 2B	3
	110	ND pump 2A	3
b.	Elevation 543+0	Auxiliary Building	
	230	NV pump 1A	3
	231	NV pump 1B	3
	240	NV pump 2A	3
	241	NV pump 2B	3
	250	Unit 1 CA pump room	1
	260	Unit 2 CA pump room	1
c.	Elevation 554+0	Auxiliary Building	
	340	Unit 2 battery room corridor (DD-EE)	2
	350	Unit 1 battery room corridor (DD-EE)	2
d.	Elevation 560+0	Auxiliary Building	
	300	KC pumps 1A1, 1A2	3
	300	KC pumps 1B1, 1B2	3
e.	Elevation 574+0	Auxiliary Building	
	480	Unit 2 cable room corridor (DD-EE)	2
	490	Unit 1 cable room corridor (DD-EE)	2
f.	Elevation 577+0	Auxiliary Building	
	400	KC pumps 2A1, 2A2	3
	400	KC pumps 2B1, 2B2	3
g.	Reactor Buildings		
		Annulus	1

Table 16.9-2-1 (page 2 of 2)

Sprinkler Systems

Fire Watch Codes for Table 16.9-2-1, Sprinkler Systems:

1. Continuous.

2. Hourly, unless Standby Shutdown System (SSS) is non-functional. If SSS is non-functional, continuous watch is required.

3. Hourly, unless opposite train component is inoperable, or sprinkler system for opposite train component is non-functional, or SSS is non-functional. If opposite train component, or sprinkler for opposite train component, or SSS is inoperable or non-functional, continuous watch is required.

BASES

The FUNCTIONALITY of the Fire Suppression Systems ensures that adequate fire suppression capability is available to confine and extinguish fires occurring in any portion of the facility where safety related equipment is located. The Fire Suppression System consists of the water supply/distribution system, sprinkler systems, fire hose stations, fire hydrants, and CO_2 systems. The collective capability of the Fire Suppression Systems is adequate to minimize potential damage to safety related equipment and is a major element in the facility Fire Protection Program.

The ability to demonstrate that the valves in the RF/RY flow path can be cycled is critical to maintaining the system properly. The containment isolation valves (RF389B and RF447B) and the annulus sprinkler system isolation valve (RF457B) are required to be cycled or stroked in accordance with the Catawba Inservice Testing Program. Therefore, credit can be taken for cycling these valves under the IWV program, and they do not need to be cycled annually to meet the SLC criteria.

The intent of TR 16.9-2-2 and TR 16.9-2-5 is to ensure the sectionalizing valve (main header valve used to isolate sections of the header) or isolation valve (branch line valve used to isolate specific fire suppression features (sprinkler system, hose standpipe, or fire hydrant)) is operating properly and can be used to achieve isolation when called upon. If a sectionalizing or isolation valve cannot be cycled but is in the correct position ensuring a FUNCTIONAL flow path (fully open) as required by COMMITMENT 16.9-1b., then the associated feature (sprinkler system, hose standpipe, or fire hydrant) can be considered FUNCTIONAL. If a sectionalizing or isolation valve cannot be cycled and is in the incorrect position, or its position cannot be determined, thereby not ensuring a FUNCTIONAL flow path (not fully open) as required by COMMITMENT 16.9-1b., then the affected fire suppression feature (sprinkler system, hose standpipe, or fire hydrant) must be evaluated and the applicable SLCs entered (16.9-2, 16.9-4, and 16.9-23). If a sectionalizing valve in a loop header (i.e., flow path from two directions) cannot be cycled and it cannot be verified as fully open, then administrative controls may need to be implemented to ensure the available flow path is not isolated.

The proper positioning of RF/RY valves is critical to delivering fire suppression water at the fire source as quickly as possible. The option of increasing or decreasing the frequency of valve position verification allows the ability to optimize plant operational resources. Should an adverse trend develop with RF/RY valve positions, the frequency of verification shall be increased. Similarly, if the RF/RY valve position trends are positive, the frequency of verification could be decreased. Through programmed trending of RF/RY as found valve positions, the RF/RY System will be maintained at predetermined reliability standards. The Fire Protection Engineer is responsible for trending and determining verification frequencies based on the following:

BASES (continued)

Initially the frequency shall be monthly.

Annually review the results of the completed valve position verification procedures.

- If the results demonstrate that the valves are found in the correct position at least 99% of the time, the frequency of conducting the valve position verification may be decreased from monthly to quarterly or quarterly to semiannually or semiannually to annually as applicable. The frequency shall not be extended beyond annually (plus grace period).

- If the results demonstrate that the valves are not found in the correct position at least 99% of the time, the frequency of conducting the valve position verification shall be increased from annually to semiannually or semiannually to quarterly or quarterly to monthly as applicable. The valve position verification need not be conducted more often than monthly.

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

When a required Sprinkler System is non-functional, the REMEDIAL ACTION is to establish an appropriate fire watch, and verify or establish backup fire suppression in the affected area. The REMEDIAL ACTION allows for the use of either a nearby fire hose station or a fire extinguisher as an acceptable means of backup fire suppression. Typically, the preferred choice is to credit a nearby fire hose station as the backup means of suppression. In most cases, nearby fire hose stations exist in the areas affected by a non-functional Sprinkler System. However, in some instances there are areas that do not contain any fire hose stations, such as the Annulus. In the case of the Annulus Sprinkler System, credit is taken for the portable fire extinguishers near the upper and lower Annulus access doors as the backup means of suppression.

This SLC is part of the Catawba Fire Protection Program and therefore subject to the provisions of Section 2.C. of the Catawba Facility Operating Licenses.

REFERENCES

1. Catawba UFSAR, Section 9.5.1.

2. Catawba SER, Section 9.5.1, including Supplements 2, 3, 4, and 5.

3. Catawba Plant Design Basis Specification for Fire Protection, CNS-1465.00-00-0006, as revised.

4. Catawba UFSAR, Section 18.2.8.

5. Catawba License Renewal Commitments, CNS-1274.00-00-0016, Section 4.12.1.

16.9 AUXILIARY SYSTEMS

16.9-23 Fire Hydrants

COMMITMENT Fire Hydrants located at the Nuclear Service Water System (NSWS) pump structure (FH61 and FH62) shall be FUNCTIONAL.

APPLICABILITY: Whenever equipment in the NSWS pump structure is required to be OPERABLE.

REMEDIAL ACTIONS

CONDITION		REQUIRED ACTION		COMPLETION TIME
A.	One Fire Hydrant non-functional.	A.1	Verify the other Fire Hydrant is FUNCTIONAL.	Immediately
		AND		
		A.2	Place out-of-service identification on the non-functional Fire Hydrant.	Immediately
		AND		
		A.3	Initiate action to restore the non-functional Fire Hydrant to FUNCTIONAL status.	Immediately
B.	Both Fire Hydrants non-functional.	B.1	Verify backup fire suppression (fire extinguishers in the NSWS pump structure) is available.	1 hour
		AND		
		B.2	Establish an hourly fire watch patrol in the NSWS pump structure.	1 hour

TESTING REQUIREMENTS

	TEST	FREQUENCY
TR 16.9-23-1	Verify that each valve in the flow path is in the correct position.	In accordance with performance based criteria in BASES
TR 16.9-23-2	Perform a visual inspection of the hydrants to assure they show no signs of physical damage.	6 months
TR 16.9-23-3	Perform a system flush of the NSWS pump structure fire protection hydrant piping to verify no flow blockage by fully opening the hydraulically most remote NSWS pump structure hydrant.	6 months
TR 16.9-23-4	Cycle each testable valve in the flow path through at least one complete cycle of full travel.	12 months

BASES

The FUNCTIONALITY of the Fire Suppression Systems ensures that adequate fire suppression capability is available to confine and extinguish fires occurring in any portion of the facility where safety related equipment is located. The Fire Suppression System consists of the water supply/distribution system, sprinkler systems, fire hose stations, fire hydrants, and CO_2 systems. The collective capability of the Fire Suppression Systems is adequate to minimize potential damage to safety related equipment and is a major element in the facility Fire Protection Program.

The intent of TR 16.9-23-4 is to ensure the sectionalizing valve (main header valve used to isolate sections of the header) or isolation valve (branch line valve used to isolate specific fire suppression features (sprinkler system, hose standpipe, or fire hydrant)) is operating properly and can be used to achieve isolation when called upon. If a sectionalizing or isolation valve cannot be cycled but is in the correct position ensuring a FUNCTIONAL flow path (fully open) as required by COMMITMENT 16.9-1b., then the associated feature (sprinkler system, hose standpipe, or fire hydrant) can be considered FUNCTIONAL. If a sectionalizing or isolation valve cannot be cycled and is in the incorrect position, or its position cannot be determined, thereby not ensuring a FUNCTIONAL flow path (not fully open) as required by COMMITMENT 16.9-1b., then the affected fire suppression feature (sprinkler system,

hose standpipe, or fire hydrant) must be evaluated and the applicable SLCs entered (16.9-2, 16.9-4, and 16.9-23). If a sectionalizing valve in a loop header (i.e., flow path from two directions) cannot be cycled and it cannot be verified as fully open, then administrative controls may need to be implemented to ensure the available flow path is not isolated.

The proper positioning of RF/RY valves is critical to delivering fire suppression water at the fire source as quickly as possible. The option of increasing or decreasing the frequency of valve position verification allows the ability to optimize plant operational resources. Should an adverse trend develop with RF/RY valve positions, the frequency of verification shall be increased. Similarly, if the RF/RY valve position trends are positive, the frequency of verification could be decreased. Through programmed trending of RF/RY as found valve positions, the RF/RY System will be maintained at predetermined reliability standards. The Fire Protection Engineer is responsible for trending and determining verification frequencies based on the following:

Initially the frequency shall be monthly.

Annually review the results of the completed valve position verification procedures.

- If the results demonstrate that the valves are found in the correct position at least 99% of the time, the frequency of conducting the valve position verification may be decreased from monthly to quarterly or quarterly to semiannually or semiannually to annually as applicable. The frequency shall not be extended beyond annually (plus grace period).

- If the results demonstrate that the valves are not found in the correct position at least 99% of the time, the frequency of conducting the valve position verification shall be increased from annually to semiannually or semiannually to quarterly or quarterly to monthly as applicable. The valve position verification need not be conducted more often than monthly.

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

This SLC is part of the Catawba Fire Protection Program and therefore subject to the provisions of Section 2.C. of the Catawba Facility Operating Licenses.

REFERENCES

1. Catawba UFSAR, Section 9.5.1.

2. Catawba SER, Section 9.5.1, including Supplements 2, 3, 4, and 5.

3. Catawba Plant Design Basis Specification for Fire Protection, CNS-1465.00-00-0006, as revised.

4. Catawba UFSAR, Section 18.2.8.

5. Catawba License Renewal Commitments, CNS-1274.00-00-0016, Section 4.12.1.

16.11 RADIOLOGICAL EFFLUENTS CONTROLS

16.11-16 Annual Radiological Environmental Operating Report and Radioactive Effluent Release Report

COMMITMENT Annual Radiological Environmental Operating Report

Routine Annual Radiological Environmental Operating Reports covering the operation of the unit during the previous calendar year shall be submitted prior to May 15 of each year.

The Annual Radiological Environmental Operating Reports shall include summaries, interpretations, and an analysis of trends of the results of the radiological environmental surveillance activities for the report period, including a comparison with preoperational studies, with operational controls as appropriate, and with previous environmental surveillance reports, and an assessment of the observed impacts of the plant operation on the environment. The reports shall also include the results of the Land Use Census.

The Annual Radiological Environmental Operating Reports shall include the results of analysis of all radiological environmental samples and of all environmental radiation measurements taken during the period pursuant to the locations specified in the table and figures in the ODCM, as well as summarized and tabulated results of these analyses and measurements in the format of the table in the Radiological Assessment Branch Technical Position, Revision 1, November 1979. In the event that some individual results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted as soon as possible in a supplementary report.

The reports shall also include the following: a summary description of the Radiological Environmental Monitoring Program; at least two legible maps (one map shall cover stations near the SITE BOUNDARY, and a second map shall include the more distant stations) covering all sampling locations keyed to a table giving distances and directions from the centerline of one reactor; the results of licensee participation in the Interlaboratory Comparison Program, required by SLC 16.11-15; discussion of all deviations from the sampling schedule of Table 16.11-13-1; and discussion of all analyses in which the LLD required by Table 16.11-13-3 was not achievable.

A single submittal may be made for the station.

(continued)

COMMITMENT (continued)

Radioactive Effluent Release Report

The Radioactive Effluent Release Report covering the operation of the unit during the previous calendar year shall be submitted before May 1 of each year. The Radioactive Effluent Release Reports shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit.

The Radioactive Effluent Release Report shall include an annual summary of hourly meteorological data collected over the previous year. This annual summary may be either in the form of an hour-by-hour listing on magnetic tape of wind speed, wind direction, atmospheric stability, and precipitation (if measured), or in the form of joint frequency distributions of wind speed, wind direction, and atmospheric stability. (In lieu of submission with the Radioactive Effluent Release Report, the licensee has the option of retaining this summary of required meteorological data on site in a file that shall be provided to the NRC upon request.) This same report shall include an assessment of the radiation doses due to the radioactive liquid and gaseous effluents released from the unit or station during the previous calendar year. A five-year average of representative onsite meteorological data shall be used in the gaseous effluent dose pathway calculations. Dispersion factors (X/Qs) and deposition factors (D/Qs) shall be generated using the computer code XOQDOQ (NUREG/CR-2919) which implements NRC Regulatory Guide 1.111. The meteorological conditions concurrent with the time of release shall be reviewed annually to determine if the five-year average values should be revised. The assessment of radiation doses shall be performed in accordance with the methodology and parameters in the ODCM.

The Radioactive Effluent Release Report shall also include an assessment of radiation doses to the likely most exposed MEMBER OF THE PUBLIC from reactor releases and other nearby uranium fuel cycle sources, including doses from primary effluent pathways and direct radiation, for the previous calendar year to show conformance with 40 CFR Part 190, "Environmental Radiation Protection Standards for Nuclear Power Operation." Acceptable methods for calculating the dose contribution from liquid and gaseous effluents are given in Regulatory Guide 1.109, Rev. 1, October 1977.

The Radioactive Effluent Release Reports shall include the following information for each type of solid waste shipped offsite during the report period:

(continued)

COMMITMENT (continued)

a. Total container volume, in cubic meters,

b. Total Curie quantity (determined by measurement or estimate),

c. Principal radionuclides (determined by measurement or estimate),

d. Type of waste (e.g., dewatered spent resin, compacted dry waste, evaporator bottoms),

e. Number of shipments, and

f. Solidification agent or absorbent (e.g., cement or other approved agents (media)).

The Radioactive Effluent Release Reports shall include a list and description of unplanned releases from the site to UNRESTRICTED AREAS of radioactive materials in gaseous and liquid effluents made during the reporting period.

The Radioactive Effluent Release Reports shall include any changes made during the reporting period to the PROCESS CONTROL PROGRAM (PCP) and to the ODCM, as well as a listing of new locations for dose calculations and/or environmental monitoring identified by the Land Use Census pursuant to SLC 16.11-14.

A single submittal may be made for the station. The submittal should combine those sections that are common to both units.

APPLICABILITY: At all times.

REMEDIAL ACTIONS None

TESTING REQUIREMENTS None

BASES None

REFERENCES None

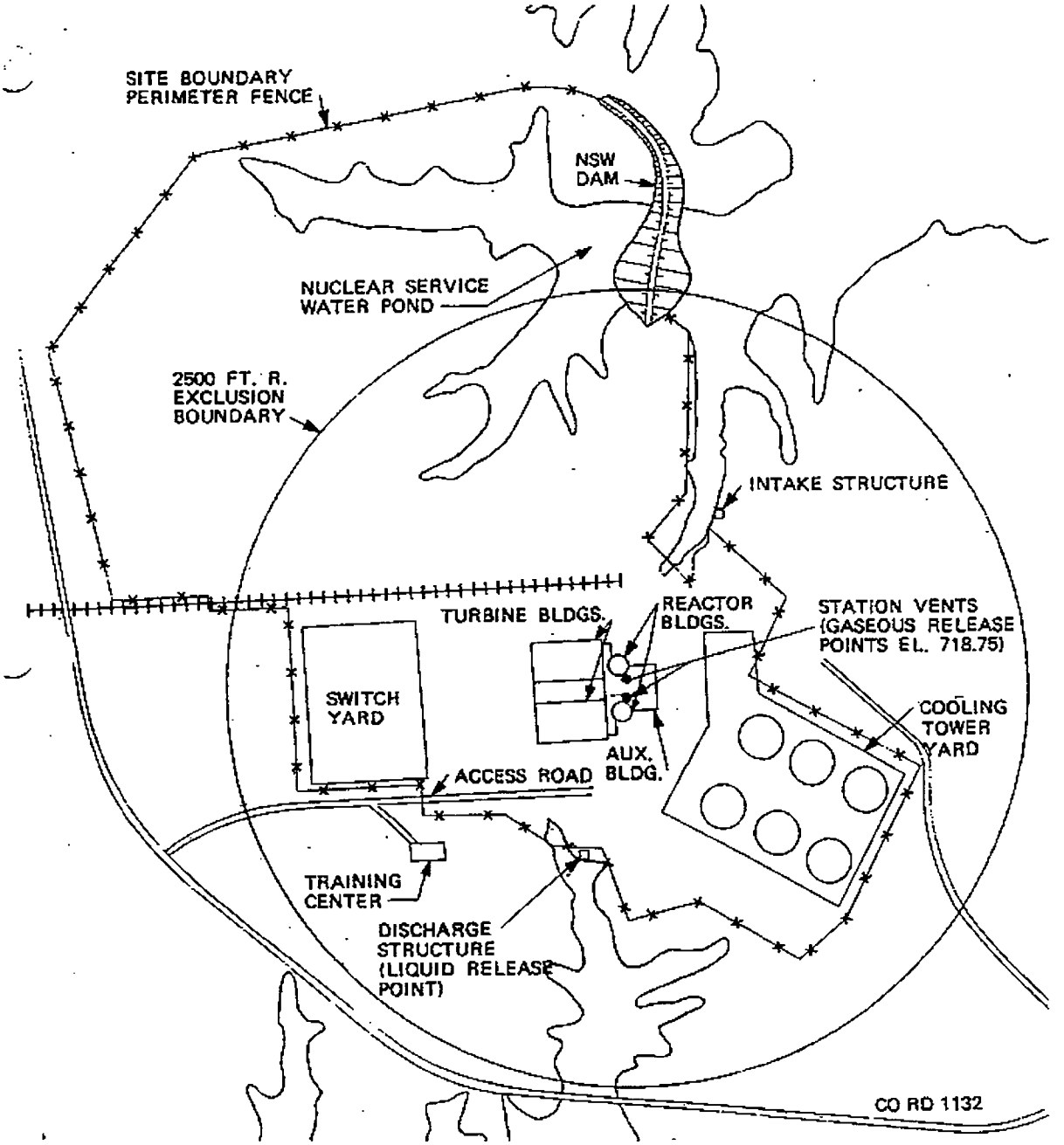

Figure 16.11-16-1

UNRESTRICTED AREA and SITE BOUNDARY for Radioactive Effluents