CATEGORY 1

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9909240103 DOC.DATE: 99/09/15 NOTARIZED: NO DOCKET #
FACIL:50-261 H.B. Robinson Plant, Unit 2, Carolina Power & Light C 05000261
AUTH.NAME AUTHOR AFFILIATION
WARDEN,R.L. Carolina Power & Light Co.
RECIP.NAME RECIPIENT AFFILIATION
Records Management Branch (Document Control Desk)

SUBJECT: Submits rev to licensee commitment to rev 3 to RG 1.97, "Instrumentation for Light-Water-Cooled NPPs to Assess Plant & Environs Conditions During & Following Accident."

DISTRIBUTION CODE: A002D COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 4
TITLE: OR Submittal:Inadequate Core Cooling (Item II.F.2) GL 82-28

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL
	SUBBARATNAM	1	1			
INTERNAL:	FILE CENTER 01	1	1	NRR/DSSA/SRXB	1	1
	RES DE	1	1	RES/DET/ERAB	1	1
	RES/DSARE/SMSAB	1	1			
EXTERNAL:	NOAC	1	1	NRC PDR	1	1

DOCUMENT CONTROL DESK

NOTE TO ALL "RIDS" RECIPIENTS:
PLEASE HELP US TO REDUCE WASTE. TO HAVE YOUR NAME OR ORGANIZATION REMOVED FROM DISTRIBUTION LISTS OR REDUCE THE NUMBER OF COPIES RECEIVED BY YOU OR YOUR ORGANIZATION, CONTACT THE DOCUMENT CONTROL DESK (DCD) ON EXTENSION 415-2083

TOTAL NUMBER OF COPIES REQUIRED: LTTR 8 ENCL 8

CATEGORY 1 DOCUMENT

CP&L

Carolina Power & Light Company
Robinson Nuclear Plant
3581 West Entrance Road
Hartsville SC 29550

Serial: RNP-RA/99-0188

SEP 15 1999

United States Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET NO. 50-261/LICENSE NO. DPR-23

REVISION 5 TO REGULATORY GUIDE 1.97 SUBMITTAL

Sir or Madam:

The purpose of this letter is to revise a Carolina Power & Light (CP&L) Company commitment to Regulatory Guide (RG) 1.97, "Instrumentation for Light-Water-Cooled Nuclear Power Plants To Assess Plant and Environs Conditions During and Following an Accident," Revision 3, pertaining to Reactor Coolant System (RCS) cold leg wide range temperature instrumentation.

By letters dated December 31, 1984, July 18, 1985, July 28, 1985, May 1, 1987, and October 9, 1987, CP&L provided its commitments to RG 1.97, which were reviewed and accepted by NRC letters dated March 5, 1987, and September 13, 1987. In the CP&L submittals, CP&L states that the RCS cold leg wide range temperature instrumentation is a Type A, Category 1 variable and the table for Type A variables states that this instrumentation is redundant and powered from the emergency diesel generators. A review of design information has found that the RCS cold leg wide range temperature instrumentation for Loops "B" and "C" share the same emergency diesel generator power supply and thus do not meet the RG 1.97 position for Category 1 variable redundancy found in Table 1, "Design and Qualification Criteria for Instrumentation," of RG 1.97. Additionally, the RCS Loop "A" cold leg wide range temperature instrument is powered from the dedicated shutdown diesel generator electrical bus and is a Category 3 variable.

Further evaluation of this variable has found that for the design basis accident events in which the control room operator is required to rely upon instrumentation to manually control actions to accomplish safety functions, power redundancy for the RCS cold leg wide range temperature instrumentation is not required. In particular, the RCS cold leg wide range temperature instrumentation is relied upon as backup/verification to the core exit temperature

A002

instrumentation for indication of core cooling. Additionally, means to determine cold leg temperatures also exist in the event that the RCS cold leg wide range temperature instrumentation is not available. Therefore, the Category, redundancy and power commitments for the RCS cold leg wide range temperature instrumentation have been changed as described in the attachment to this letter. A revised page to the CP&L submittal dated December 31, 1984 is provided in the attachment.

If you have any questions on this subject, please contact Mr. H. K. Chernoff.

Sincerely,

for R. L. Warden
Manager - Regulatory Affairs

ALG/alg

Attachment
c: NRC Resident Inspector, HBRSEP
L. A. Reyes, NRC, Region II
R. Subbaratnam, NRC, NRR

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
REVISION 5 TO REGULATORY GUIDE 1.97 SUBMITTAL

TABLE A

Safety Function	Variable	Sensor	Cat	RG 1.97 or HBR	Range	EQ	SQ	Power	Redun-dant	Sensor Loca-tion	Display	Recorder	Comments
Reactivity Control	Neutron flux (Source Range)	N31 N32	1	RG 1.97 HBR	Plant Specific 10^0 - 10^6 cps	Yes No	Yes No	Standby N31-DB N32-BB	Yes Yes	-- CV	Continuous RTGB	Yes Yes(2)	
Core Cooling	RCS Pressure (WR)	PT-402	1	RG 1.97 HBR	Plant Specific 0 - 3000 psi	Yes Yes	Yes Yes	Standby DB	Yes No	-- CV	Continuous RTGB	Yes Yes	Recorder has a DB power supply.
Core Cooling	Core Exit Temperature	T1 thru T51	1	RG 1.97 HBR	Plant Specific 100-700°F	Yes No	Yes No	Standby DB	Yes Yes(3)	-- CV	Continuous On Demand	Yes No	All T/Cs have same power supply.
Core Cooling	RCS Hot Leg Water Temperature	TE-413 TE-423 TE-433	1	RG 1.97 HBR	Plant Specific 50-650°F	Yes No	Yes No	Standby DB	Yes Yes	-- CV	Continuous RTGB	Yes Yes	One recorder provides only RTGB indication for all 3 channels, BB power supply.
Core Cooling	RCS Cold Leg Water Temperature	TE-410 TE-420 TE-430	1	RG 1.97 HBR	Plant Specific 50-650°F	Yes No	Yes No	Standby Ch.A-No Ch.B-DB Ch.C-DB	Yes Yes	-- CV	Continuous RTGB	Yes Yes	One recorder provides only RTGB indication for all 3 channels, DB power supply. TE-410 is Category 3 variable. TE-420 and TE-430 share the same power supply.
Core Cooling	RWST Level	LT-948	1	RG 1.97 HBR	Plant Specific 0-100%	Yes (1)	Yes (1)	Standby BB	Yes No	-- Yard	Continuous RTGB	Yes No	
Core Cooling	CST Level	LT-1454A LT-1454B	1	RG 1.97 HBR	Plant Specific 0-100%	Yes Yes	Yes ORIG	Standby Ch.A-DB Ch.B-DB	Yes Yes	-- Yard	Continuous RTGB	Yes No	Mild environment