



James Scarola  
Vice President  
Harris Nuclear Plant

DEC 16 2002

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

SERIAL: HNP-02-162  
10CFR50.90

SHEARON HARRIS NUCLEAR POWER PLANT  
DOCKET NO. 50-400/LICENSE NO. NPF-63  
REQUEST FOR LICENSE AMENDMENT – RESPONSE TIME TESTING ELIMINATION  
SUPPLEMENTAL DATA

Dear Sir or Madam:

In a letter dated August 30, 2002 and in accordance with the Code of Federal Regulations, Title 10, Part 50.90, Carolina Power & Light Company (CP&L) requested a revision to the Technical Specifications (TS) for the Harris Nuclear Plant (HNP). The proposed amendment revises Technical Specifications Definitions 1.13, Engineered Safety Features (ESF) Response Time and 1.29, Reactor Trip System (RTS) Response Time. Also proposed in this change request are revisions to Surveillance Requirements 4.3.1.2 and 4.3.2.2 and BASES Sections B 3 /4.3.1 and B 3 /4.3.2. These changes will revise the definition and surveillance requirements for response time testing of the Engineered Safety Feature Actuation System (ESFAS) and the Reactor Trip System.

This letter provides additional information to supplement the information provided in the amendment request and the letter HNP-02-141 dated November 21, 2002, which also provided supplemental information. Attachment 1 provides additional information that may prove useful as the NRC evaluates the referenced license amendment request.

In accordance with 10 CFR 50.91(b), CP&L is providing the State of North Carolina with a copy of the proposed license amendment.

Please refer any questions regarding this submittal to Mr. J. R. Caves at (919) 362-3137.

Sincerely,

RTG

Attachment:

1. Supplemental information/data in support of the License Amendment request.

PO Box 165  
New Hill, NC 27562

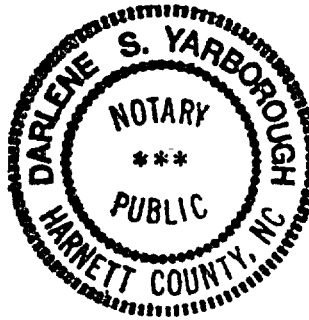
T > 919 362 2502  
F > 919 362 2095

*Aool*

SERIAL: HNP-02-162

James Scarola, having been first duly sworn, did depose and say that the information contained herein is true and correct to the best of his information, knowledge and belief, and the sources of his information are employees, contractors, and agents of Carolina Power & Light Company.

*Darlene S. Yarbrough*



Notary (Seal)  
My commission expires:

*2-21-2005*

c:

Mr. J. B. Brady, NRC Sr. Resident Inspector

Ms. Beverly Hall, Section Chief, Radiation Protection Section, N.C. DENR

Mr. R. Subbaratnam, NRC Project Manager

Mr. L. A. Reyes, NRC Regional Administrator

SHEARON HARRIS NUCLEAR POWER PLANT  
NRC DOCKET NO. 50-400/LICENSE NO. NPF-63  
REQUEST FOR LICENSE AMENDMENT  
FOR RESPONSE TIME TESTING ELIMINATION  
FROM TECHNICAL SPECIFICATIONS

SUPPLEMENTAL DATA

Background

The following comments provide additional information that may be helpful in the evaluation of the Harris Plant license amendment submittal:

1. On page E1-4 of 13 in the item identified in the TS change submittal as "3", HNP uses the terminology "pressure transmitters" versus "transmitters and switches." The term "pressure transmitters" is clarified to mean "transmitters and switches" in this context.
2. On page E1-4 of 13 in the item identified as "3", HNP says "HNP has no pressure transmitters..." This wording is clarified to mean, "HNP has no transmitters with variable damping" in this context.
3. The following table provides the data used in the selection of a bounding response time for Rosemount Model 1153 and 1154 transmitters as described on pages E1 - 8 to 12 of 13.

## HNP Rosemount Transmitter Response Times (Refueling Outages 3-10)

Function	Model No.	Tag No.	(2) Historical Rosemount Transmitter Response Times (secs)							
			RO3	RO4	RO5	RO6	RO7	RO8	RO9	RO10
Reactor Coolant Flows	1154HP5RA	FT-0414	0.113 <sup>(1)</sup>			0.03			0.05	
		FT-0424	0.100 <sup>(1)</sup>			0.03			0.04	
		FT-0434	0.120 <sup>(1)</sup>			0.05			0.06	
		FT-0415	0.100 <sup>(1)</sup>	0.02			0.04			0.04
		FT-0425	0.105 <sup>(1)</sup>	0.02			0.04			0.04
		FT-0435	0.125 <sup>(1)</sup>	0.02			0.05			0.04
		FT-0416	0.120 <sup>(1)</sup>		0.09			0.05		
		FT-0426	0.112 <sup>(1)</sup>		0.04			0.04		
Pressurizer Pressure	1154SH9RA	PT-0455	0.030 <sup>(1)(3)</sup>			0.44			0.44	
		PT-0456	0.030 <sup>(1)(3)</sup>	0.39			0.38			0.41
		PT-0457	0.023 <sup>(1)(3)</sup>		0.32			0.36		
RWST Level	1153DB5RA	LT-0991					0.03 <sup>(1)</sup>			0.13 <sup>(1)</sup>
		LT-0993							0.05 <sup>(1)</sup>	

Table Notes:

- (1) Data taken using the hydraulic ramp method. All other data obtained from noise analysis method. Note that this table reflects the times from both the hydraulic response method and the noise analysis method. The times from the RC flow hydraulic response method were not used in the 95/95 analysis because of the substantial difference between the hydraulic ramp method and the noise analysis methodology time response results. However, the maximum response time of 0.130 seconds for the RC flow transmitters using either method is substantially less than the 0.44 second bounding response time selected for this submittal.
- (2) All data is taken from completed surveillance tests MST-I0622, MST-I0651, EST-300, and EST-313, as applicable.
- (3) The table reflects a minor correction to the response times for the pressurizer pressure transmitters for the initial hydraulic ramp testing performed on these units prior to installation in RO3. The response times for the pressurizer pressure transmitters using the hydraulic ramp method are 0.023 to 0.030, including an additional 10 milliseconds to reflect a "maximum reference error" used for measurement error. This was not noted when collecting the data for the original submittal. However, this minor increase does not change the 0.194 second upper limit obtained for the 95/95 analysis that was performed. These times were not used in the pressurizer pressure noise analysis. This omission was detected during a re-validation of all of the data that was performed in response to this question.

General Notes:

- (1) In addition to the bases provided in the original submittal for selection of the 0.44 seconds for the Rosemount transmitter bounding response time proposed for HNP, it should be noted that this time bounds the Rosemount transmitter response times used in RTT elimination submittals from two other plants. The submittals were approved by the NRC. One of these plants also uses the Rosemount Model 1154SH9 transmitter in the pressurizer pressure application.
- (2) New Reactor Coolant Flow and Pressurizer Pressure Rosemount transmitters were installed in RO3 to replace existing Barton transmitters.