



Duke Power Company
A Duke Energy Company

McGuire Nuclear Station
MG01VP
12700 Hagers Ferry Rd.
Huntersville, NC 28078-9340

H. B. Barron
Vice President, McGuire
Nuclear Generation Department

(704) 875-4800 OFFICE
(704) 875-4809 FAX

June 3, 2002

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

Subject: Duke Energy Corporation
McGuire Nuclear Station, Units 1 and 2
Docket Numbers 50-369 and 50-370
Technical Specifications Amendment Request for
Additional Information (RAI); 1.1 Definitions,
Response Time; 3.3.1 Reactor Trip System
Instrumentation and 3.3.2 ESFAS Instrumentation

Reference: Letter from Mr. H.B. Barron to NRC dated March
26, 2002

This letter provides additional information that was requested by the NRC staff during a teleconference call on May 16, 2002. Attached you will find the excel spreadsheets which contain the historical data for the McGuire response time testing of the transmitters associated with the recent License Amendment Request (LAR). The first table contains the actual Unit 1 response times from 1991 through the present for the applicable transmitters. The second table contains the actual Unit 2 response times from 1990 through the present for the applicable transmitters. The third table calculated the slowest response time from all the applicable transmitters for both units (approximately 265 data points) of 0.410 seconds. A conservative bounding time of 0.500 seconds was then selected and used for the sensor time allocation in the LAR submittal.

Acc

U.S. Nuclear Regulatory Commission

June 3, 2002

Page 2

If you have any questions with respect to this matter,
please call Norman T. Simms of Regulatory Compliance at
704-875-4685.

Very truly yours,

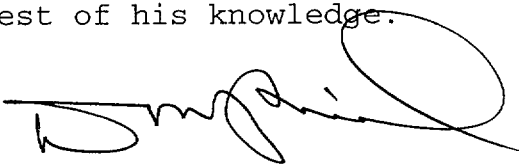
A handwritten signature in black ink, appearing to read "H.B. Barron". The signature is stylized and cursive, with a large loop at the end.

H.B. Barron

Attachments

AFFIDAVIT

D.M. Jamil, being duly sworn, states that he is Acting-Vice President of Duke Energy Corporation; that he is authorized on the part of said corporation to sign and file with the Nuclear Regulatory Commission these amendments to the McGuire Nuclear Station Facility Operating Licenses Nos. NPR-9 and NPF-17 and associated Technical Specifications; and that all statements and matters set forth within this submittal dated June 3, 2002 are true and correct to the best of his knowledge.



D.M. Jamil, Acting-Vice President

Subscribed and sworn to me: June 3, 2002
Date

Deborah S. Rome Deborah S. Rome, Notary Public

My commission expires: December 19, 2004

SEAL

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

R.E. Martin
NRC Project Manager (MNS)
U.S. Nuclear Regulatory Commission
One White Flint North, Mail Stop O-8 G9
11555 Rockville Pike
Rockville, MD 20852-2738

S.M. Shaeffer
NRC Senior Resident Inspector
McGuire Nuclear Station

M. Frye
Division of Radiation Protection
3825 Barrett Drive
Raleigh, NC 27609-7221

bxc w/attachments:

C.J. Thomas
R.L. Pacetti
N.T. Simms
K.L. Crane
R.L. Gill
McGuire Master File # 1.3.2.9
Elliott

ATTACHMENTS

	A	B	C	D	E	F	G	H	I	J	K	
1	MNS Unit 1			Table 1 - Historical Transmitter Response Times (seconds)								
2			Test Date	Jul-91	Jan-93	Jul-94	Nov-95	Jan-97	May-98	Aug-99	Jan-01	
3	U1 Reactor Coolant (NC) Flows	ITT Barton 764	1NCFT5000		0.14			0.11			0.13	
4			1NCFT5010			0.12			0.12			
5			1NCFT5020	0.13			0.12			0.15		
6			1NCFT5030		0.09			0.09			0.09	
7			1NCFT5040			0.1			0.1			
8			1NCFT5050	0.09			0.1			0.11		
9			1NCFT5060		0.1			0.1			0.11	
10			1NCFT5070			0.11			0.12			
11			1NCFT5080	0.11			0.1			0.13		
12			1NCFT5090		0.12			0.1			0.13	
13			1NCFT5100			0.16			0.15			
14			1NCFT5110	0.14			0.14			0.14		
15			U1 Steam Generator Level	ITT Barton 764	1CFLT5490	0.27		0.21			0.28	
16					1CFLT5500			0.21		0.23		
17	1CFLT5510				0.14			0.13		0.17		
18	1CFLT5520	0.21					0.21		0.29			
19	1CFLT5530					0.22		0.25				
20	1CFLT5540				0.12			0.11		0.16		
21	1CFLT5550	0.26					0.21		0.33			
22	1CFLT5560					0.2		0.25				
23	1CFLT5570				0.12			0.12		0.17		
24	1CFLT5580	0.23					0.24		0.28			
25	1CFLT5590					0.37		0.33				
26	1CFLT5600				0.13			0.11		0.15		
27	1CFLT6000				0.23			0.23		0.2		
28	1CFLT6010				0.23			0.2		0.36		
29	1CFLT6020				0.22			0.23		0.3		
30	1CFLT6030		0.24			0.24		0.31				
31	U1 Pressurizer Pressure	ITT Barton 763	1NCPT5150		0.31			0.33				
32			1NCPT5160	0.38			0.35					
33			1NCPT5170			0.38			0.37			
34			1NCPT5171				Note A			0.34		
35	U1 Containment Pressure	ITT Barton 386A	1NSPT5040			0.13		0.058				
36			1NSPT5050	0.06			0.046		0.04			
37			1NSPT5060		0.035			0.144		0.035		
38			1NSPT5070		0.048			0.14		0.039		

	A	B	C	D	E	F	G	H	I	J	K
1	MNS Unit 1		Table 1 - Historical Transmitter Response Times (seconds)								
2			Test Date	Jul-91	Jan-93	Jul-94	Nov-95	Jan-97	May-98	Aug-99	Jan-01
39	U1 Steam Line Pressure	Rosemount 1153	1SMPT5080		0.04			0.02			0.03
40			1SMPT5090			0.02			0.02		
41			1SMPT5100	0.06			0.02			0.02	
42			1SMPT5110		0.02			0.02			0.03
43			1SMPT5120			0.02			0.02		
44			1SMPT5130	0.04			0.02			0.02	
45			1SMPT5140		0.03			0.03			0.03
46			1SMPT5150			0.02			0.02		
47			1SMPT5160	0.04			0.02			0.02	
48			1SMPT5170		0.05			0.02			0.03
49			1SMPT5180			0.02			0.02		
50	1SMPT5190	0.07			0.02			0.02			
51	<p style="text-align: center;"><i>Note A: Recorded Time of 0.001 seconds was excluded from the calculations due to it being a severe outlier.</i></p>										
52											

	A	B	C	D	E	F	G	H	I	J	K	L		
1	MNS Unit 2			Table 2 - Historical Transmitter Response Times (seconds)										
2			Test Date	Jul-90	Dec-91	May-93	Oct-94	Jan-96	Aug-97	Feb-99	Apr-00	Jan-02		
3	U2 Reactor Coolant (NC) Flows	ITT Barton 764	2NCFT5000	0.11			0.15			0.16				
4			2NCFT5010		0.12			0.14			0.13			
5			2NCFT5020			0.12				0.11			0.12	
6			2NCFT5030	0.08			0.11				0.13			
7			2NCFT5040		0.11			0.14				0.12		
8			2NCFT5050			0.12				0.13			0.12	
9			2NCFT5060	0.072			0.12				0.12			
10			2NCFT5070		0.11			0.13				0.14		
11			2NCFT5080			0.11				0.1			0.1	
12			2NCFT5090	0.07				0.09			0.1			
13			2NCFT5100		0.11			0.11				0.12		
14			2NCFT5110			0.11				0.11			0.1	
15			U2 Steam Generator Level	ITT Barton 764	2CFLT5490		0.21			0.22			0.37	
16					2CFLT5500	0.21			0.22			0.29		
17	2CFLT5510					0.12				0.13		0.17		
18	2CFLT5520				0.19			0.2			0.29			
19	2CFLT5530	0.21					0.24				0.27			
20	2CFLT5540					0.15				0.15		0.18		
21	2CFLT5550				0.22			0.23				0.34		
22	2CFLT5560	0.18					0.23				0.32			
23	2CFLT5570					0.13				0.12		0.19		
24	2CFLT5580				0.19			0.2				0.39		
25	2CFLT5590	0.17					0.23				0.34			
26	2CFLT5600					0.12				0.12		0.4		
27	2CFLT6000					0.17				0.19		0.36		
28	2CFLT6010					0.17				0.2		0.18		
29	2CFLT6020					0.2				0.2		0.39		
30	2CFLT6030			0.18				0.22		0.38				
31	U2 Pressurizer Pressure	ITT Barton 763	2NCPT5150				0.31				0.004			
32			2NCPT5160			0.38				0.36				
33			2NCPT5170	0.21				0.4						
34			2NCPT5171			0.31				0.37		0.41		
35	U2 Containment Pressure	ITT Barton 386A	2NSPT5040			0.04			0.044			Note B		
36			2NSPT5050		0.0305			0.031			0.028			
37			2NSPT5060	0.03			0.062			0.03				
38			2NSPT5070	0.03			0.092			0.03				

	A	B	C	D	E	F	G	H	I	J	K	L	
1	MNS Unit 2			Table 2 - Historical Transmitter Response Times (seconds)									
2			Test Date	Jul-90	Dec-91	May-93	Oct-94	Jan-96	Aug-97	Feb-99	Apr-00	Jan-02	
39	U2 Steam Line Pressure	Rosemount 1153	2SMPT5080	0.03			0.04			0.04			
40			2SMPT5090		0.02			0.02				0.03	
41			2SMPT5100				0.04			0.03			0.03
42			2SMPT5110	0.02				0.03			0.04		
43			2SMPT5120		0.02				0.02			0.03	
44			2SMPT5130				0.03			0.04			0.04
45			2SMPT5140	0.03				0.04			0.04		
46			2SMPT5150			0.03			0.03				0.03
47			2SMPT5160				0.03			0.03			0.04
48			2SMPT5170	0.03				0.02			0.03		
49			2SMPT5180			0.02			0.03			0.03	
50	2SMPT5190				0.03			0.03			0.03		
51													
52	<i>Note B : The transmitter response time test has not been performed as of 2/18/02</i>												

	A	B	C	D	E
1	Table 3 - Slowest Transmitter Response Times (seconds)				
2					
3					
4	Transmitter	Slowest Response Time from U1	Slowest Response Time from U2	Slowest from either Unit	Bounded by:
5	ITT Barton 764	0.370	0.400	0.400	0.5
6	ITT Barton 763	0.380	0.410	0.410	0.5
7	ITT Barton 386A	0.144	0.092	0.144	0.5
8	Rosemount 1153	0.070	0.040	0.070	0.5
9					
10	All Transmitters	0.380	0.410	0.410	0.5