Duke Energy

H. B. Barron
Vice President

Duke Energy Corporation
McGuire Nuclear Station
12700 Hagers Ferry Road
Huntersville, NC 28078-9340
(704) 875-4800 OFFICE
(704) 875-4809 FAX

February 15, 2001

U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

Subject: McGuire Nuclear Station,
Docket No.50-369, 50-370
Units 1 and 2, Cycle 14
Core Operating Limits Report (COLR)

Pursuant to McGuire Technical Specification 5.6.5.d, please find enclosed a revision to the McGuire Unit 1 and Unit 2, Cycle 14 Core Operating Limits Reports (COLR).

The COLRs were updated to provide revised minimum Boric Acid Tank (BAT) volumes needed to assure adequate shutdown margin for the current Unit 1 and Unit 2 fuel cycles. These revisions were initiated after discovery of non-conservative inputs to the calculations which provide these minimum required volumes. A corrective action program (CAP) report (PIP M-01-00435) was initiated and interim conservative limits were established for minimum BAT volume. A review of historical data has determined that actual BAT volumes have been maintained well above the new COLR minimum required values. This condition was determined not to be reportable.

Questions regarding this submittal should be directed to Kay Crane, McGuire Regulatory Compliance at (704) 875-4306.

H. B. Barron

Attachment

A001

cc: Mr. R. E. Martin, Project Manager
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Mr. Luis Reyes, Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
Atlanta Federal Center
61 Forsyth St., SW, Suite 23T85
Atlanta, GA 30323

Mr. Scott Shaeffer
Senior Resident Inspector
McGuire Nuclear Station

McGuire Unit 1 Cycle 14

Core Operating Limits Report
Revision 20

February 2001

Calculation Number: MCC-1553.05-00-0310, Rev. 2

Duke Power Company

		Date
Prepared By:	Sandra D Borchi	Feb. 01, 2001
Checked By:	Jeff Gfeller	2.01.2001
Checked By:	R J Alexander	2/1/01
Approved By:	P.M. Abraham	2/1/01

QA Condition 1

The information presented in this report has been prepared and issued in accordance with McGuire Technical Specification 5.6.5.

McGuire 1 Cycle 14 Core Operating Limits Report

IMPLEMENTATION INSTRUCTIONS FOR REVISION 20

Revision 20 of the McGuire Unit 1 COLR should be implemented immediately.

McGuire 1 Cycle 14 Core Operating Limits Report

REVISION LOG

Revision	Effective Date	Effective Pages	COLR
Revisions 0-3	Superseded	N/A	M1C09
Revisions 4-8	Superseded	N/A	M1C10
Revisions 9-11	Superseded	N/A	M1C11
Revisions 12-15	Superseded	N/A	M1C12
Revisions 16-17	Superseded	N/A	M1C13
Revision 18	September 21, 1999	6, 8-11, 13-14, 15, 17-21	M1C14
Revision 19	September 12, 2000	5, 7, 7a-d, 12, 14a, 16	M1C14 (Rev. 1)
Revision 20	February 1, 2000	1-4, 22 and 23	M1C14 (Rev. 2)

McGuire 1 Cycle 14 Core Operating Limits Report

INSERTION SHEET FOR REVISION 20

Remove pages	Insert Rev. 20 pages
Pages 1-4, 22 and 23	Pages 1-4, 22 and 23

McGuire 1 Cycle 14 Core Operating Limits Report

2.14 Borated Water Source – Shutdown (SLC 16.9.14)

2.14.1 Volume and boron concentrations for the Boric Acid Storage System and the Refueling Water Storage Tank (RWST) during modes 5 and 6.

Parameter	Limit
Boric Acid Storage System minimum contained borated water volume	9,079 gallons 10.38% Level
Boric Acid Storage System minimum boron concentration	7,000 ppm
Boric Acid Storage System minimum water volume required to maintain SDM at 7,000 ppm	780 gallons
Refueling Water Storage Tank minimum contained borated water volume	43,000 gallons 35 inches
Refueling Water Storage Tank minimum boron concentration	2,675 ppm
Refueling Water Storage Tank minimum water volume required to maintain SDM at 2,675 ppm	3,500 gallons

McGuire 1 Cycle 14 Core Operating Limits Report

2.15 Borated Water Source - Operating (SLC 16.9.11)

2.15.1 Volume and boron concentrations for the Boric Acid Storage System and the Refueling Water Storage Tank (RWST) during modes 1, 2, 3, and mode 4:

Parameter	Limit
Boric Acid Storage System minimum contained borated water volume	23,843 gallons 41.80% Level
Boric Acid Storage System minimum boron concentration	7,000 ppm
Boric Acid Storage System minimum water volume required to maintain SDM at 7,000 ppm	13,174 gallons
Refueling Water Storage Tank minimum contained borated water volume	96,607 gallons 103.6 inches
Refueling Water Storage Tank minimum boron concentration	2,675 ppm
Refueling Water Storage Tank maximum boron concentration (TS 3.5.4)	2875 ppm
Refueling Water Storage Tank minimum water volume required to maintain SDM at 2,675 ppm	57,107 gallons

NOTE: Data contained in the Appendix to this document was generated in the McGuire 1 Cycle 14 Maneuvering Analysis calculation file, MCC-1553.05-00-0289. The Plant Nuclear Engineering Section will control this information via computer file(s) and should be contacted if there is a need to access this information.

McGuire Unit 2 Cycle 14

Core Operating Limits Report
Revision 19

February 2001

Calculation Number: MCC-1553.05-00-0328, Rev. 1

Duke Power Company

		Date
Prepared By:	Sandra B Bowie	Feb. 1, 2001
Checked By:	Jeff Thomas	2.01.2001
Checked By:	R J Hall-Kelt	2/1/01
Approved By:	P. M. Abraham	2/1/01

QA Condition 1

The information presented in this report has been prepared and issued in accordance with McGuire Technical Specification 5.6.5.

McGuire 2 Cycle 14 Core Operating Limits Report

IMPLEMENTATION INSTRUCTIONS FOR REVISION 19

Revision 19 of the McGuire Unit 2 COLR should be implemented immediately.

McGuire 2 Cycle 14 Core Operating Limits Report

REVISION LOG

Revision	Issuance Date	Effective Pages	COLR
Revisions 0-2	Superseded	N/A	M2C09
Revisions 3-6	Superseded	N/A	M2C10
Revisions 7-12	Superseded	N/A	M2C11
Revision 13-15	Superseded	N/A	M2C12
Revision 16-17	Superseded	N/A	M2C13
Revision 18	September 19, 2000	5-25	M2C14 (Orig. Issue)
Revision 19	February 1, 2001	1-4, 26, 27	M2C14 (Revision)

McGuire 2 Cycle 14 Core Operating Limits Report

INSERTION SHEET FOR REVISION 19

Remove pages	Insert Rev. 18 pages
Pages 1-4, 26, and 27	Pages 1-4, 26, and 27

McGuire 2 Cycle 14 Core Operating Limits Report

2.14 Borated Water Source – Shutdown (SLC 16.9.14)

2.14.1 Volume and boron concentrations for the Boric Acid Storage System and the Refueling Water Storage Tank (RWST) during modes 5 and 6.

Parameter	Limit
Boric Acid Storage System minimum contained borated water volume	9,079 gallons 10.38% Level
Boric Acid Storage System minimum boron concentration	7,000 ppm
Boric Acid Storage System minimum water volume required to maintain SDM at 7,000 ppm	780 gallons
Refueling Water Storage Tank minimum contained borated water volume	43,000 gallons 35 inches
Refueling Water Storage Tank minimum boron concentration	2,675 ppm
Refueling Water Storage Tank minimum water volume required to maintain SDM at 2,675 ppm	3,500 gallons

McGuire 2 Cycle 14 Core Operating Limits Report

2.15 Borated Water Source - Operating (SLC 16.9.11)

2.15.1 Volume and boron concentrations for the Boric Acid Storage System and the Refueling Water Storage Tank (RWST) during modes 1, 2, 3, and mode 4:

Parameter	Limit
Boric Acid Storage System minimum contained borated water volume	23,843 gallons 41.80% Level
Boric Acid Storage System minimum boron concentration	7,000 ppm
Boric Acid Storage System minimum water volume required to maintain SDM at 7,000 ppm	13,174 gallons
Refueling Water Storage Tank minimum contained borated water volume	96,607 gallons 103.6 inches
Refueling Water Storage Tank minimum boron concentration	2,675 ppm
Refueling Water Storage Tank maximum boron concentration (TS 3.5.4)	2875 ppm
Refueling Water Storage Tank minimum water volume required to maintain SDM at 2,675 ppm	57,107 gallons

---

NOTE: Data contained in the Appendix to this document was generated in the McGuire 2 Cycle 14 Maneuvering Analysis calculation file, MCC-1553.05-00-0323. The Plant Nuclear Engineering Section will control this information via computer file(s) and should be contacted if there is a need to access this information.