McGuire Unit 1 Cycle 10

Core Operating Limits Report

November 1995

(rev. 4)

Duke Power Company

		Date
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QA Condition 1

NOTE

The contents of this document have been reviewed to verify that no material herein either directly or indirectly changes or affects the results and conclusions presented in the 10CFR50.59 M1C10 Reload Safety Evaluation (calculation file: MCC-1552.08-00-0245).

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REVISION LOG

Revision	Effective Date	Effective Pages	COLR
Original Issue, Revisions 1-3	Superceded	N/A	M1C09
Revision 4	September 13, 1994	Pages 5-8, 12-18	M1C10
Revision 5	October 18, 1994	N/A	M1C10, rev. 1
Revision 6	October 24, 1994	Pages 4, 19	M1C10, rev. 2
Revision 7	June 26, 1995	Page 11	M1C10, rev. 3
Revision 8	November 28, 1995	Pages 1-3, 9, 10, 19	M1C10, rev. 4

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Insertion Sheet for Revision 8

Remove pages	Insert . pages
Pages 1- 3, 9, 10, 19	Pages 1-3, 9, 10, 19 (rev. 8)

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3.1 Tech Spec 3/4.1.2.5 - Borated Water Source - Shutdown

3.1.1 Volume, tank levels and boron concentrations for the Boric Acid Storage System and the Refueling Water Storage Tank (RWST) during modes 5 & 6:

Parameter	Limit
Boric Acid Storage System minimum contained borated water volume for LCO 3.1.2.5a	8,884 gallons 12.8% level
Boric Acid Storage System minimum boron concentration for LCO 3.1.2.5a	7,000 ppm
Boric Acid Storage System minimum water volume required to maintain SDM at 7,000 ppm	585 gallons
Refueling Water Storage Tank minimum contained borated water volume for LCO 3.1.2.5b	26,000 gallons 33.3 inches
Refueling Water Storage Tank minimum boron concentration for LCO 3.1.2.5b	2,175 ppm
Refueling Water Storage Tank minimum water volume required to maintain SDM at 2,175 ppm	3,500 gallons

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3.2 Tech Spec 3/4.1.2.6 - Borated Water Source - Operating

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

Parameter	Limit
Boric Acid Storage System minimum contained borated water volume for LCO 3.1.2.6a	20,520 gallons 38.6% level
Boric Acid Storage System minimum boron concentration for LCO 3.1.2.6a	7,000 ppm
Boric Acid Storage System minimum water volume required to maintain SDM at 7,000 ppm	9,851 gallons
Refueling Water Storage Tank minimum contained borated water volume for LCO 3.1.2.6b	91,000 gallons 116.4 inches
Refueling Water Storage Tank minimum boron concentration for LCO 3.1.2.6b	2,175 ppm
Refueling Water Storage Tank maximum boron concentration for LCO 3.5.5b	2,275 ppm
Refueling Water Storage Tank minimum water volume required to maintain SDM at 2,175 ppm	57,107 gallons

3.3 Tech Spec 3/4.1.3.5 - Shutdown Rod Insertion Limit

3.3.1 The shutdown rods shall be withdrawn to at least 222 steps.

3.4 Tech Spec 3/4.1.3.6 - Control Rod Insertion Limits

3.4.1 The control rod banks shall be limited to physical insertion as shown in Figure 2.

3.5 Tech Spec 3/4.2.1 - Axial Flux Difference

3.5.1 The Axial Flux Difference (AFD) Limits are provided in Figure 3.

3.10 Tech Spec 3/4.9.1 - Refueling Operations - Boron Concentration

3.10.1 Minimum boron concentrations for the filled portions of the Reactor Coolant System and refueling canal. Applicable for mode 6 with the reactor vessel head closure bolts less than fully tensioned, or with the head removed.

Parameter	Limit
Refueling boron concentration for the filled portions of the Reactor Coolant System and refueling canal for LCO 3.9.1.b.	2175 ppm

3.11 Tech Spec 3/4.9.12 - Fuel Storage - Spent Fuel Storage Pool

3.11.1 Minimum boron concentration limit for the spent fuel pool. Applicable when fuel is stored in the spent fuel pool.

Parameter	Limit
Spent fuel pool minimum boron concentration for LCO 3.9.12	2175 ppm

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Note:

Data contained in Tables in the Appendix to this document were generated in the McGuire 1 Cycle 10 Maneuvering Analysis calculational file (MCC-1553.05-00-0119.) The McGuire Reactor Engineering Group will control this information via computer file(s) and should be contacted if there is a need to access this information.