



JAMES R. MORRIS
Vice President

Duke Energy Corporation
Catawba Nuclear Station
4800 Concord Road
York, SC 29745

803-701-4251
803-701-3221 fax

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U.S. Nuclear Regulatory Commission
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Subject: Duke Energy Carolinas, LLC
Catawba Nuclear Station, Units 1 and 2
Docket Nos. 50-413 and 50-414
Technical Specification Bases Changes

Pursuant to 10CFR 50.4, please find attached changes to the Catawba Nuclear Station Technical Specification Bases. These Bases changes were made according to the provisions of 10CFR 50.59.

Any questions regarding this information should be directed to L. J. Rudy, Regulatory Compliance, at (803)701-3084.

I certify that I am a duly authorized officer of Duke Energy Corporation and that the information contained herein accurately represents changes made to the Technical Specification Bases since the previous submittal.

A handwritten signature in black ink, appearing to read 'James R. Morris', with a stylized flourish at the end.

James R. Morris

Attachment

A001
MRR

U.S. Nuclear Regulatory Commission
July 13, 2010
Page 2

xc: L. A. Reyes
U. S. Nuclear Regulatory Commission
Regional Administrator, Region II
Marquis One Tower
245 Peachtree Center Ave., NE Suite 1200
Atlanta, GA 30303 - 1257

J. H. Thompson, NRR Project Manager
U.S. Nuclear Regulatory Commission
One White Flint North, Mail Stop 8 G9A
11555 Rockville Pike
Rockville, MD 20852-2738

G. A. Hutto
Senior Resident Inspector
Catawba Nuclear Station

U.S. Nuclear Regulatory Commission
July 13, 2010
Page 3

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NCMPA-1
NCEMC
PMPA

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Page Number	Amendment	Revision Date
B 3.6.13-9	Revision 1	12/4/06
B 3.6.14-1	Revision 0	9/30/98
B 3.6.14-2	Revision 0	9/30/98
B 3.6.14-3	Revision 0	9/30/98
B 3.6.14-4	Revision 0	9/30/98
B 3.6.14-5	Revision 0	9/30/98
B 3.6.14-6	Revision 0	9/30/98
B 3.6.15-1	Revision 0	9/30/98
B 3.6.15-2	Revision 0	9/30/98
B 3.6.15-3	Revision 0	9/30/98
B 3.6.15-4	Revision 0	9/30/98
B 3.6.16-1	Revision 1	4/09/99
B 3.6.16-2	Revision 2	9/30/05
B 3.6.16-3	Revision 2	9/30/05
B 3.6.16-4	Revision 0	9/30/05
B 3.6.17-1	Revision 1	3/13/08
B 3.6.17-2	Revision 0	9/30/98
B 3.6.17-3	Revision 0	9/30/98
B 3.6.17-4	Revision 0	9/30/98
B 3.6.17-5	Revision 1	3/13/08
B 3.7.1-1	Revision 0	9/30/98
B 3.7.1-2	Revision 0	9/30/98
B 3.7.1-3	Revision 0	9/30/98
B 3.7.1-4	Revision 1	10/30/09
B 3.7.1-5	Revision 1	10/30/09
B 3.7.2-1	Revision 0	9/30/98
B 3.7.2-2	Revision 0	9/30/98
B 3.7.2-3	Revision 2	6/23/10
B 3.7.2-4	Revision 1	9/08/08
B 3.7.2-5	Revision 3	10/30/09
B 3.7.3-1	Revision 0	9/30/98
B 3.7.3-2	Revision 0	9/30/98

BASES

LCO This LCO requires that four MSIVs in the steam lines be OPERABLE. The MSIVs are considered OPERABLE when the isolation times are within limits, and they close on an isolation actuation signal.

This LCO provides assurance that the MSIVs will perform their design safety function to mitigate the consequences of accidents that could result in offsite exposures comparable to the 10 CFR 50.67 (Ref. 5) limits or the NRC staff approved licensing basis.

APPLICABILITY The MSIVs must be OPERABLE in MODE 1, and in MODES 2 and 3 except when closed and de-activated, when there is significant mass and energy in the RCS and steam generators. When the MSIVs are closed, they are already performing the safety function.

In MODE 4, the steam generator energy is low.

In MODE 5 or 6, the steam generators do not contain much energy because their temperature is below the boiling point of water; therefore, the MSIVs are not required for isolation of potential high energy secondary system pipe breaks in these MODES.

ACTIONS A.1

With one MSIV inoperable in MODE 1, action must be taken to restore OPERABLE status within 8 hours. Some repairs to the MSIV can be made with the unit hot. The 8 hour Completion Time is reasonable, considering the low probability of an accident occurring during this time period that would require a closure of the MSIVs.

The 8 hour Completion Time is greater than that normally allowed for containment isolation valves because the MSIVs are valves that isolate a closed system penetrating containment. These valves differ from other containment isolation valves in that the closed system provides an additional means for containment isolation.

B.1

If the MSIV cannot be restored to OPERABLE status within 8 hours, the unit must be placed in a MODE in which the LCO does not apply. To achieve this status, the unit must be placed in MODE 2 within 6 hours and Condition C would be entered. The Completion Times are

BASES

ACTIONS (continued)

reasonable, based on operating experience, to reach MODE 2 and to close the MSIVs in an orderly manner and without challenging unit systems.

C.1 and C.2

Condition C is modified by a Note indicating that separate Condition entry is allowed for each MSIV.

Since the MSIVs are required to be OPERABLE in MODES 2 and 3, the inoperable MSIVs may either be restored to OPERABLE status or closed. When closed, the MSIVs are already in the position required by the assumptions in the safety analysis.

The 8 hour Completion Time is consistent with that allowed in Condition A.

For inoperable MSIVs that cannot be restored to OPERABLE status within the specified Completion Time, but are closed, the inoperable MSIVs must be verified on a periodic basis to be closed. This is necessary to ensure that the assumptions in the safety analysis remain valid. The 7 day Completion Time is reasonable, based on engineering judgment, in view of MSIV status indications available in the control room, and other administrative controls, to ensure that these valves are in the closed position.

D.1 and D.2

If the MSIVs cannot be restored to OPERABLE status or are not closed within the associated Completion Time, the unit must be placed in a MODE in which the LCO does not apply. To achieve this status, the unit must be placed at least in MODE 3 within 6 hours, and in MODE 4 within 12 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from MODE 2 conditions in an orderly manner and without challenging unit systems.

SURVEILLANCE REQUIREMENTS

SR 3.7.2.1

This SR verifies that the closure time of each MSIV is ≤ 8.0 seconds on an actual or simulated actuation signal. The MSIV closure time is assumed in the accident and containment analyses. This SR also