



JAMES R. MORRIS  
Vice President

Catawba Nuclear Station  
4800 Concord Rd. / CN01VP  
York, SC 29745-9635

803 831 4251  
803 831 3221 fax

December 20, 2006

U.S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555-0001

Subject: Duke Power Company LLC d/b/a 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  
A. P. Jackson, Regulatory Compliance, at (803) 831-3742.

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.

James R. Morris

Attachment

U.S. Nuclear Regulatory Commission  
December 20, 2006  
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xc: W. D. Travers, Regional Administrator  
U.S. Nuclear Regulatory Commission, Region II  
Sam Nunn Atlanta Federal Center  
61 Forsyth Street, S.W., Suite 23T85  
Atlanta, GA 30303-8931

J. F. Stang, Jr., NRR Project Manager  
U.S. Nuclear Regulatory Commission  
One White Flint North, Mail Stop 8 H4A  
11555 Rockville Pike  
Rockville, MD 20852-2738

A.T. Sabisch  
Senior Resident Inspector  
Catawba Nuclear Station



DUKE ENERGY CORPORATION  
Catawba Nuclear Station  
4800 Concord Road  
York, SC 29745

803 831 3000

December 20, 2006

Re: Catawba Nuclear Station  
Technical Specifications Bases

Please replace the corresponding pages in your copy of the Catawba Technical Specifications Manual as follows:

**REMOVE THESE PAGES**

**INSERT THESE PAGES**

**LIST OF EFFECTIVE PAGES**

Page 26

Page 26

**TAB 3.6.13**

**B 3.6.13-7 – B 3.6.13-9**

**B 3.6.13-7 – B 3.6.13-9**

If you have any questions concerning the contents of this Technical Specification update, contact Debbie Rome at (803)831-3067.

Randy Hart  
Manager, Regulatory Compliance

<b>Page Number</b>	<b>Amendment</b>	<b>Revision Date</b>
B 3.6.11-3	Revision 0	9/30/98
B 3.6.11-4	Revision 1	2/26/99
B 3.6.11-5	Revision 2	2/26/99
B 3.6.12-1	Revision 3	5/10/05
B 3.6.12-2	Revision 2	5/10/05
B 3.6.12-3	Revision 3	5/10/05
B 3.6.12-4	Revision 3	5/10/05
B 3.6.12-5	Revision 2	5/10/05
B 3.6.12-6	Revision 4	5/10/05
B 3.6.12-7	Revision 3	5/10/05
B 3.6.12-8	Revision 2	5/10/05
B 3.6.12-9	Revision 3	5/10/05
B 3.6.12-10	Revision 2	5/10/05
B 3.6.12-11	Revision 1	5/10/05
B 3.6.13-1	Revision 0	9/30/98
B 3.6.13-2	Revision 0	9/30/98
B 3.6.13-3	Revision 0	9/30/98
B 3.6.13-4	Revision 0	9/30/98
B 3.6.13-5	Revision 0	9/30/98
B 3.6.13-6	Revision 0	9/30/98
B 3.6.13-7	Revision 0	9/30/98
B 3.6.13-8	Revision 2	12/4/06
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

BASES

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SURVEILLANCE REQUIREMENTS (continued)

- c. The light construction of the doors would ensure that, in the event of a DBA, air and gases passing through the ice condenser would find a flow path, even if a door were obstructed.

SR 3.6.13.4

Verifying, by visual inspection, that the ice condenser inlet doors are not impaired by ice, frost, or debris provides assurance that the doors are free to open in the event of a DBA. For this unit, the Frequency of 18 months is based on door design, which does not allow water condensation to freeze, and operating experience, which indicates that the inlet doors very rarely fail to meet their SR acceptance criteria. Because of high radiation in the vicinity of the inlet doors during power operation, this Surveillance is normally performed during a shutdown.

SR 3.6.13.5

Verifying the opening torque of the inlet doors provides assurance that no doors have become stuck in the closed position. The value of 675 in-lb is based on the design opening pressure on the doors of 1.0 lb/ft<sup>2</sup>. For this unit, the Frequency of 18 months is based on the passive nature of the closing mechanism (i.e., once adjusted, there are no known factors that would change the setting, except possibly a buildup of ice; ice buildup is not likely, however, because of the door design, which does not allow water condensation to freeze). Operating experience indicates that the inlet doors usually meet their SR acceptance criteria. Because of high radiation in the vicinity of the inlet doors during power operation, this Surveillance is normally performed during a shutdown.

SR 3.6.13.6

The torque test Surveillance ensures that the inlet doors have not developed excessive friction and that the return springs are producing a door return torque within limits. The torque test consists of the following:

BASES

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SURVEILLANCE REQUIREMENTS (continued)

1. Verify that the torque, T(OPEN), required to cause opening motion at the 40° open position is  $\leq 195$  in-lb;
2. Verify that the torque, T(CLOSE), required to hold the door stationary (i.e., keep it from closing) at the 40° open position is  $\geq 78$  in-lb but  $\leq 250.6$  in-lb; and
3. Calculate the frictional torque,  $T(\text{FRICT}) = 0.5 \{T(\text{OPEN}) - T(\text{CLOSE})\}$ , and verify that the T(FRICT) is  $\geq -40$  in-lb but  $\leq +40$  in-lb.

The purpose of the friction and return torque Specifications is to ensure that, in the event of a small break LOCA or SLB, all of the 24 door pairs open uniformly. This assures that, during the initial blowdown phase, the steam and water mixture entering the lower compartment does not pass through part of the ice condenser, depleting the ice there, while bypassing the ice in other bays. The Frequency of 18 months is based on the passive nature of the closing mechanism (i.e., once adjusted, there are no known factors that would change the setting, except possibly a buildup of ice; ice buildup is not likely, however, because of the door design, which does not allow water condensation to freeze). Operating experience indicates that the inlet doors very rarely fail to meet their SR acceptance criteria. Because of high radiation in the vicinity of the inlet doors during power operation, this Surveillance is normally performed during a shutdown.

SR 3.6.13.7

Verifying the OPERABILITY of the intermediate deck doors provides assurance that the intermediate deck doors are free to open in the event of a DBA. The verification consists of visually inspecting the intermediate doors for structural deterioration, verifying free movement of the vent assemblies, and ascertaining free movement of each door when lifted with the applicable force shown below:

<u>Door</u>	<u>Lifting Force</u>
a. Adjacent to crane wall	$\leq 37.4$ lb
b. Paired with door adjacent to crane wall	$\leq 33.8$ lb
c. Adjacent to containment wall	$\leq 31.8$ lb
d. Paired with door adjacent to containment wall	$\leq 31.0$ lb

BASES

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SURVEILLANCE REQUIREMENTS (continued)

The 18 month Frequency is based on the passive design of the intermediate deck doors, the frequency of personnel entry into the intermediate deck, and the fact that SR 3.6.13.2 confirms on a 7 day Frequency that the doors are not impaired by ice, frost, or debris, which are ways a door would fail the opening force test (i.e., by sticking or from increased door weight).

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REFERENCES

1. UFSAR, Chapter 6.
2. 10 CFR 50, Appendix K.
3. 10 CFR 50.36, Technical Specifications, (c)(2)(ii).
4. DPC-1201.17-00-0006, "Design and Licensing Basis for Ice Condenser Lower Inlet Doors Technical Specification Surveillance Requirements, 40° Opening, Closing and Frictional Torques."