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June 28, 2006

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

Subject: Duke Power Company LLC d/b/a Duke Energy Carolinas, LLC  
Catawba Nuclear Station, Units 1 and 2  
Docket Nos. 50-413, 50-414  
NRC Generic Letter 2004-02, Potential Impact of Debris Blockage on  
Emergency Recirculation During Design Basis Accidents at Pressurized-  
Water Reactors, Commitment Status Update

On September 13, 2004 the Nuclear Regulatory Commission (NRC) issued Generic Letter 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors." Duke Power, currently Duke Energy Carolinas (Duke) provided the required responses on March 1, 2005 and September 1, 2005.

On February 9, 2006, the NRC issued requests for additional information (RAI) for Oconee, McGuire and Catawba Nuclear Stations. Subsequent to these requests, on February 28, 2006, the Nuclear Energy Institute (NEI) submitted a request to extend the response dates to the RAIs on behalf of PWR licensees.

On March 3, 2006, the NRC provided a response to Anthony R. Pietrangelo of NEI granting the requested schedule relief. Duke's April 7, 2006 letter was submitted to inform the NRC that Duke would take advantage of the schedule relief granted by the NRC by submitting responses to RAIs contained in the February 9, 2006 letters by December 31, 2006.

This letter provides a status of the commitments in the September 1, 2005 submittal. The status is provided on Attachment 1.

If any questions arise or additional information is needed, please contact Mary Shipley at (704) 382-5880.

Very truly yours,

Dhiaa M. Jamil

Attachment

A116

Dhiaa M. Jamil affirms that he is the person who subscribed his name to the foregoing statement, and that all the matters and facts set forth herein are true and correct to the best of his knowledge.



Dhiaa M. Jamil,  
Site Vice President  
Catawba Nuclear Station

Subscribed and sworn to me: \_\_\_\_\_

6/28/06  
Date



Notary Public

My commission expires: \_\_\_\_\_

7/2/2014  
Date

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**Attachment 1  
Catawba Nuclear Station  
GL 2004-02 Commitment Status**

September 1, 2005 Commitment

1. *A baseline evaluation has been performed for Catawba by Enercon Services, Inc. This evaluation was performed using the guidance of NEI 04-07. The evaluation is currently under review by Catawba and will be complete by June 30, 2006.*

Status

The baseline evaluation for Catawba Nuclear Station has been reviewed and accepted by Catawba. **This commitment is closed.**

September 1, 2005 Commitment

2. *A refined evaluation using the guidance of NEI 04-07 will be completed for Catawba by Enercon Services, Inc. The evaluation is currently in progress and will be completed by June 30, 2006. This evaluation will provide plant-specific refinements to the baseline evaluation that can be justified for Catawba. This evaluation is expected to provide additional head loss margin for the containment sump.*

Status

The original scope of the refined analysis has been reviewed and accepted by Catawba. **This commitment is closed.**

September 1, 2005 Commitment

3. *A downstream effects evaluation will be completed for Catawba by Enercon Services, Inc. This evaluation will be performed using the methodology provided by WCAP-16406-P, "Evaluation of Downstream Sump Debris Effects in Support of GSI 191," (WCAP-16406-P). The evaluation is currently in progress and will be completed by June 30, 2006. Any additional plant modifications or procedure changes associated with this evaluation will be completed by December 31, 2007.*

Status

The downstream effects evaluation for erosion and blockage of components (pumps, valves and orifices) is complete. Necessary plant modifications to address potential blockage of ECCS valves have been identified and will be completed by December 31, 2007. The documentation of the effectiveness of the bypass eliminators regarding fuel blockage is incomplete. This documentation will be complete by December 31, 2006. **The completion of this documentation is considered a new commitment.**

**Attachment 1  
Catawba Nuclear Station  
GL 2004-02 Commitment Status**

September 1, 2005 Commitment

4. *Chemical effects will be evaluated to confirm that sufficient margin exists in the final sump design to account for this head loss. The evaluation will be complete by June 30, 2006. Any additional plant modifications or procedure changes associated with this evaluation will be completed by December 31, 2007.*

Status

The replacement strainers are being designed with additional margin in an effort to accommodate increased head loss due to chemical effects. Testing and analysis to address chemical effects are not complete. Testing for chemical effects started on June 2, 2006. Upon completion of testing, the results will be evaluated and further actions will be determined.

Downstream chemical effects are still under investigation by the industry with the intent of addressing this issue by December 31, 2007. **This is a new commitment date.**

September 1, 2005 Commitment

5. *Confirmatory walkdowns of containment using the guidance of NEI 02-01, "Condition Assessment Guidelines: Debris Sources Inside PWR Containments" (NEI 02-01) were completed for Catawba Unit 2 in the Fall of 2004 and for Catawba Unit 1 in the Spring of 2005.*

Status

The walkdowns of containment using the guidance of NEI 02-01 were completed in the fall of 2004 for Unit 2 and the spring of 2005 for Unit 1. **This commitment is closed.**

September 1, 2005 Commitment

6. *A confirmation of the conservatism of the 200 pound latent debris assumption used in the baseline analysis will be performed by latent debris surveys/sampling during the Catawba Unit 2 Spring refueling outage in 2006*

Status

Latent debris sampling completed by Enercon Services, Inc. during the Catawba Unit 2 spring 2006 refueling outage confirmed the conservatism of the 200 pound latent debris assumption. **This commitment is closed.**

September 1, 2005 Commitment

7. *The plant labeling process will be enhanced to require that any additional labels or signs placed inside containment are evaluated to ensure that the design basis for transportable debris is not invalidated. This corrective action will be completed by December 31, 2007.*

**Attachment 1  
Catawba Nuclear Station  
GL 2004-02 Commitment Status**

**Status**

The enhancement of the plant labeling process will be completed as committed. **This commitment is on schedule.**

**September 1, 2005 Commitment**

8. *Testing will be performed to confirm that the replacement strainer head loss is acceptable under design basis debris loaded conditions. This testing will be conducted prior to installation of the replacement strainers.*

**Status**

Head loss testing has been completed by Enercon Services, Inc. Test reports have been issued by Enercon and are currently under review by Catawba. This review will be completed by December 31, 2006. **This commitment is on schedule.**

**September 1, 2005 Commitment**

9. *A modified containment sump strainer and supporting structure will be installed in the Fall of 2006 for Catawba Unit 1 and in the Fall of 2007 for Catawba Unit 2.*

**Status**

**The installation of the containment sumps is on track to be completed as committed.**

**September 1, 2005 Commitment**

10. *Replacement of the Microtherm® insulation (currently installed on portions of the reactor vessel heads) will be completed in the Fall of 2006 for Catawba Unit 1 and in the Fall of 2007 for Catawba Unit 2. The replacement of this insulation will reduce the postulated post-accident debris loading on the sump strainer.*

**Status**

**This commitment is on track to be completed as committed.**

Attachment 1  
Catawba Nuclear Station  
GL 2004-02 Commitment Status

September 1, 2005 Commitment

*11. Duke will evaluate the modification process to determine if additional controls are needed in order to maintain the validity of inputs to analyses performed in resolving GSI-191 concerns. This evaluation will be completed by June 30, 2006.*

Status

The subject evaluation has been completed and documented in the Duke corrective action program. Additional controls were deemed prudent. These additional controls will be implemented by December 31, 2007. **This commitment has been revised to reflect a due date for incorporation into site documents.**