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June 12, 2002

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

Subject: Catawba Nuclear Station Units 1 & 2
Docket Nos. 50 -413, 414
Response to NRC Bulletin 2002-01
Reactor Pressure Vessel Head Degradation and
Reactor Coolant Pressure Boundary Integrity

Pursuant to 10 CFR 50.54(f), this letter and the associated attached enclosures provide Duke Energy Corporation's (Duke's) response to specific items of NRC Bulletin 2002-01 for Catawba Nuclear Station (CNS). This bulletin requested plant-specific information as a result of NRC staff concerns regarding reactor pressure vessel head degradation and reactor coolant pressure boundary integrity.

Responses are provided for Bulletin items 2.A and 2.B in Enclosure I. These responses provide information concerning the results of the reactor vessel head inspection.

Enclosure II contains the responses to NRC request for additional information on Duke's letter dated April 1, 2002 for the 15-day letter to NRC Bulletin 2002-01. These requests were provided during a telecom on May 20, 2002.

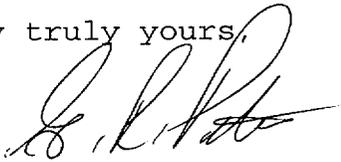
There are no regulatory commitments contained in this letter or its enclosures.

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If you have questions or need additional information, please contact Gregory S. Kent at (704)373-6032 or George Strickland at (803) 831-3585.

Very truly yours,

A handwritten signature in black ink, appearing to read "G.R. Peterson". The signature is fluid and cursive, with a large initial "G" and a long, sweeping underline.

G.R. Peterson

Enclosures I and II

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xc: L.A. Reyes
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NRC Project Manager (CNS)
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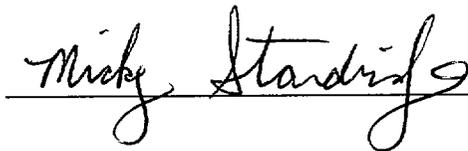
D.J. Roberts
Senior Resident Inspector (CNS)

OATH or AFFIRMATION

G.R. Peterson, 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.

 _____, Vice President, Catawba Nuclear Site

Subscribed and sworn to me: 6-12-2002
Date

 _____, Notary Public

My Commission Expires: 6-26-2002
Date

ENCLOSURE I
Catawba Nuclear Station
Response to NRC Bulletin 2002-01

Requested Information

2. **Within 30 days after restart following the next inspection of the reactor pressure vessel head to identify any degradation, all PWR addressees are required to submit to the NRC the following information:**
 - A. **the inspection scope (if different than that provided in response to item 1.D.) and results including the location, size and nature of any degradation detected**

Response:

Catawba Nuclear Station (CNS) Unit 1 conducted a complete bare metal visual inspection of the reactor pressure vessel head on May 4, 2002. The scope of this inspection is consistent with CNS's response to 1.D. of this Bulletin. The results of this inspection indicated that the head is free of degradation due to corrosion or wastage resulting from boric acid.

The CNS Unit 1 refueling outage for end of cycle 13 was concluded on May 18, 2002, when the unit was placed on-line.

Requested Information

2. **Within 30 days after restart following the next inspection of the reactor pressure vessel head to identify any degradation, all PWR addressees are required to submit to the NRC the following information:**
 - B. **The corrective actions taken and the root cause of the degradation.**

Response:

No degradation was identified. Therefore, no corrective action was necessary.

ENCLOSURE II
Catawba Nuclear Station
Response to NRC Request
for Additional Information

Requested Information

1. **Your 15 day response to Bulletin 2002-01 documents past leakage due to conoseals, and in the case of Catawba Unit 2, a control rod drive mechanism (CRDM) vent line plug. Clarify whether there was any evidence that the leakage reached the reactor pressure vessel head insulation.**

Response:

There is evidence that some past leaks on both units did reach the head insulation.

Requested Information

2. **For leakage that may have reached the insulation, discuss the inspections that were performed at these locations (i.e., were the partial head inspections that are mentioned in the 15 day Bulletin response performed in these regions).**

Response:

The inspections conducted at the time of the leaks were limited to the top of the insulation and the components above the insulation. No inspection of the head itself was performed and the partial head inspections in 1997 would not have been sufficient to identify all of the boron that may have reached the head during the conoseal or CRDM leaks.

However, the complete bare metal inspection of the Unit 1 reactor pressure vessel head is complete as indicated in Enclosure I of this letter. The Unit 2 head inspection is planned for the next refueling outage March 2003 as indicated in the April 1, 2002 response.

Requested Information

3. **For each leakage event, quantify the amount of boric acid deposits that were on the insulation and the basis for assuming that no boric acid reached the head in those regions.**

Response:

It is impossible to do an event-specific evaluation at this time. Some early cycle leaks occurred prior to the initiation of the work management system (WMS) and problem identification process (PIP) programs. At the time of discovery, all leaks were repaired and the boric acid removed from the top of the insulation and all components above the insulation. There is no basis for assuming that no boric acid reached the head. There is the possibility that some boric acid did reach the head; however, it would have immediately dried from the heat. Also, as the leakage was not on the head, there would have been no constant source of moisture to lead to corrosion of the head.

Based upon interviews of the personnel who were at Catawba at the time of the leaks, their best recollections of the leaks were:

- 1990 Unit 2 conoseal leak was less than 5 gpm and some boron is assumed to have reached the head.
- 1991 Unit 2 CRDM vent plug leak was small and some boron may have reached the head.
- 1992 Unit 1 conoseal leak was minimal with only a small amount of boron found on the bottom flange of one conoseal. None of the borated water reached the head.
- 1995 Unit 2 conoseal leak was minimal with only a trace of boron found around the lower hubs of three conoseals. None of the borated water reached the head.

In addition to the leaks above, one leak has been identified based upon the review of outage log books. This leak occurred in 1987. A Unit 1 CRDM vent plug leak was several gallons based upon the amount of boron found on the head during the recent bare metal inspection.

Requested Information

4. **Clarify whether or not all leaks were repaired during the outage in which they were detected.**

Response:

All leaks were repaired during the outage in which they were detected.