

November 18, 2002

LICENSEE: Duke Energy Corporation

FACILITIES: McGuire, Units 1 and 2, and Catawba, Units 1 and 2

SUBJECT: PUBLIC MEETING WITH DUKE ENERGY CORPORATION TO DISCUSS  
OPEN ITEMS FROM THE SAFETY EVALUATION REPORT FOR THE  
LICENSE RENEWAL APPLICATION FOR MCGUIRE, UNITS 1 AND 2, AND  
CATAWBA, UNITS 1 AND 2

On September 17 and 18, 2002, the staff met with members of Duke Energy Corporation in a public meeting to discuss the open items documented in its safety evaluation report (SER) for the license renewal application (LRA) for McGuire, Units 1 and 2, and Catawba, Units 1 and 2. Although the meeting notice indicated that time was reserved for the morning of September 19, 2002, to discuss miscellaneous residual issues, no meetings were held on September 19, 2002. The list of attendees is provided in Enclosure 1. Also enclosed are the meeting agenda (Enclosure 2) and handouts provided by the applicant during the meetings (Enclosures 3 through 8).

#### Electrical issues

The applicant provided proposed responses to the open and confirmatory items pertaining to electrical issues in a meeting handout (Enclosure 3) and additional materials (e.g., drawings) during the meeting. The applicant furnished a one-line diagram of the 230 KV switching station and, during the meeting, highlighted the power path that was included in the scope of license renewal as a result of request for additional information (RAI) 2.5-1. Although the highlighted drawings clearly depicted the offsite power path, the drawings were too large to attach to this meeting summary. To ensure that drawings depicting the offsite power path could be placed in ADAMS and, thereby, be accessible by the public, the staff requested the applicant include a simplified diagram on an 8.5-inch by 11-inch page in its formal response to the open item. The staff also requested that the applicant specify the maximum cable voltage for the cables that were brought into scope.

The staff and applicant discussed the proposed response to Open Item 3.6.1-1. The staff reviewed the information provided in the handout and listened to the applicant explain its opinion that visual inspection to identify localized areas of heat exposure was adequate. The staff indicated that it would consider the information provided by the applicant and would discuss the issue internally before reacting to the proposed response. Subsequent to the meetings, the staff expressed, to the applicant, its continued belief that visual inspection was inadequate in detecting minor insulation degradation of high range radiation monitor and high voltage neutron monitoring instrumentation cables that could significantly affect the accuracy of associated signals.

The staff did not express concerns about the proposed responses to Confirmatory Items 3.6.1-1 and 3.6.2-1.

### Reactor coolant system issues

The applicant provided proposed responses to the open and confirmatory items pertaining to electrical issues in a meeting handout (Enclosure 4) and additional materials (e.g., drawings) during the meeting. For Open Item 3.0.3.10.2-1, the applicant agreed that volumetric examination of a sample of small-bore Class 1 piping is needed to demonstrate that the effects of aging are adequately managed. However, the staff indicated that the sample of small-bore piping, to be inspected by the applicant, should include susceptible locations, particularly small-bore piping with butt welds that will or could be susceptible to stress-corrosion cracking or thermal fatigue cracking resulting from turbulent penetration dynamics or thermal stratification. Therefore, the staff requested that the applicant determine if the risk-informed inservice inspection program, referenced in its proposed response, accounts for identification of these susceptible locations and determine the consequences of leakage or failure.

For Open Item 3.0.3.10.2-2, which involves the hot leg cracking event at V.C. Summer, the staff indicated that the proposed response from Duke should be reviewed by additional NRC technical staff that was not present during the meeting, and that the applicant would be informed by the staff if any reservations about this proposed response arose.

For Open Item 3.1.2.2.2-1, the staff indicated that the proposed response was inadequate in resolving the open item. The staff explained that a one-time inspection, using a VT-3 examination technique, would not reveal tight cracks that could propagate over time and eventually result in spray head failure. Therefore, VT-3 did not provide adequate assurance that the pressurizer spray head would continue to perform its intended function, consistent with the current licensing basis, during the period of extended operation.

For Open Item 3.1.3.2.2-1, the staff reviewed the proposed response and discussed the information therein with the applicant. The discussion was very helpful because the applicant clarified the meaning of terms from Tables B.3.26-1 and B.3.26-2 of the LRA. The applicant also explained the intended use of McGuire and the anticipated use of Capsule Z for McGuire, Units 1 and 2. The staff requested that the applicant explain the intended meaning of the terms “standby” and “storage” from the LRA tables in its formal response to the open item. The staff also requested that the applicant provide more detail on the use of Capsule Z as a charpy specimen, a fracture-toughness specimen, and/or a tensile-strength specimen in its formal response.

For Open Item 3.1.3.2.2-2, the applicant revised its proposed response from that which is documented in the handout. Instead, the applicant proposed to delete the FSAR supplement provided at the top of page 9 of the handout and offered to provide the bottom paragraph on page 8 of the handout as an FSAR supplement summary description of the aging management program (AMP). The staff indicated that the wording of the alternative summary description seemed to imply that the UFSAR description of the program would be revised only if changes were made to the program “. . . as described in each UFSAR. . . .” The staff was concerned that the UFSAR would not be updated to reflect changes to details or aspects of the program that was not already documented in the UFSAR. The applicant acknowledged this concern and

stated that it would propose a summary description that did not imply this conditional change to the UFSAR description of the program.

For Open Item 3.1.4-1(a), the staff reviewed the proposed response and indicated to the applicant its concern that there was no assurance that the Oconee vessel internals were sufficiently similar to the McGuire, Unit 2, and Catawba, Units 1 and 2, in order to provide meaningful, applicable data for McGuire, Unit 2, and Catawba, Units 1 and 2. The applicant and staff discussed this issue at length and ultimately agreed that staggered inspections of the McGuire, Unit 1, internals (around the 40<sup>th</sup> year of plant life) and the McGuire, Unit 2, internals (around the 50<sup>th</sup> year of plant life) would provide reasonable assurance that the reactor vessel internals for McGuire, Units 1 and 2, would continue to perform their intended functions, consistent with the current licensing basis, during the period of extended operation. The staff asked the applicant to explain why results of McGuire, Units 1 and 2, internals inspections could be used to determine the condition of Catawba, Units 1 and 2, internals. The applicant responded that the McGuire vessel internals were subject to more stresses, higher operating temperatures, and longer operating periods (exposure to neutron bombardment and associated embrittlement) and, therefore, provided a leading indication of the condition of the Catawba, Units 1 and 2, vessel internals. The staff requested that the applicant include this information in its formal response to the open item.

For Open Item 3.1.4-1(b), the staff reviewed the proposed response and requested that the applicant specify (in its official response to the open item) that, for items comprising plates, forgings and welds, the critical crack size [an acceptance criterion] will be determined by analysis and submitted to the NRC staff for review and approval prior to the inspection. The staff requested that the applicant provide similar revisions to the proposed responses pertaining to the acceptance criteria for baffle bolts, for items fabricated from cast austenitic stainless steel, and for items subject to dimensional changes due to void swelling in its formal response to the open item.

The staff did not express concerns about the proposed responses to Open Item 3.1.4(c).

For Open Item 3.1.5-1, the staff reviewed the proposed response and requested that the applicant ensure that the reference to NEI 97-06, "Steam Generator Program Guidelines," is tied to the summary description of the Steam Generator Surveillance Program.

For Open Item 4.3-3, the staff reviewed the proposed response. The staff also reviewed, again, the July 9, 2002, response to potential Open Item 4.3-6, and the materials that were referenced therein. The staff reiterated its conclusion that it did not have sufficient information about the McGuire, Unit 2, fabrication process to conclude that underclad cracking is not a potential concern. The staff also reiterated that, since ultrasonic inspection is not effective at detecting defects of the size generated by the phenomenon, results cannot conclusively rule out underclad cracking as a potential aging effect for the reactor vessel nozzles. The staff encouraged the applicant to pursue an analytical approach to resolve this issue.

#### Thermal fatigue issues

The applicant provided proposed responses to the open items pertaining to thermal fatigue issues in a handout (Enclosure 5) during the meeting. The applicant also provided excerpts from Calculation CNC-1223.02-00-0001, "Catawba Nuclear Station Unit 1 & 2 Class 1 Piping

Transient Parameter Analysis” (Enclosure 6). The staff did not express concerns about the applicant’s proposed response, although the staff did indicate that the third paragraph on page 6 of the handout, beginning “Since the specific issue of fatigue reactor water effects...” was not material to resolving new open item 4.3-4 and could be omitted from Duke’s official response.

#### Structural issues

The applicant provided proposed responses to the open items pertaining to structural issues in a handout (Enclosure 7) during the meeting. The staff and applicant discussed proposed responses to the open items. For Open Item 2.3-3, the applicant proposed four surveillance tests that are currently required by technical specifications as AMPs for structural sealants that provide a pressure boundary function. The staff indicated that it would need time to review the proposed AMPs and would get back to the applicant if concerns were identified.

For Open Items 3.5-1 and 3.5-3, the staff indicated that the responses proposed by the applicant would not resolve the open items. The applicant noted that, for Open Item 3.5-3, it had re-evaluated the ice condenser wear slab and determined that the scoping criteria were not met for this component and that it should have been excluded from scope. The applicant explained its basis for this determination, and the staff did not identify any concerns with the decision.

For Open Item 3.5-2, the staff reiterated its decision to close the open item, based upon its reconsideration of a postulated chemical spill onsite at either McGuire or Catawba that could substantially alter the groundwater environment. Prior to the meeting, the staff had conveyed its conclusion to the applicant that such a postulated spill was considered hypothetical and, therefore, beyond the scope of the license renewal rule.

For Open Item 3.5-4, the staff indicated that the proposed response would not resolve the open item because additional detail pertaining to the inspection of subcomponents of the battery rack (specifically, anchorages) was not specified in the FSAR supplement.

The staff did not express concerns about proposed responses to Open Items 3.0.3.11.3-1, 3.0.3.18.3-1, or 3.5-5.

#### Mechanical scoping and screening issues

The applicant provided proposed responses to the open and confirmatory items pertaining to mechanical scoping and screening issues in a handout (Enclosure 8) during the meeting. The staff reviewed the proposed responses and, with the exception of Open Items 2.3-1 and 2.3-2, did not express any concerns. For Open Items 2.3-1 and 2.3-2, the staff reiterated its position that the housings for fans and dampers are passive (like pumps casings and valve bodies) and were considered within the scope of license renewal. Therefore, the proposed responses for these open items were not effective in resolving the issues.

#### Mechanical aging management issues

The applicant provided proposed responses to the open items pertaining to mechanical aging management issues in a handout (Enclosure 8) during the meeting. The staff reviewed the proposed responses. For Open Item 3.0.3.2.3-1, the staff indicated that the EPRI-TR numbers

could be eliminated as long as the titles were provided. The staff also requested that the applicant specify the specific technical specification (TS) surveillance number(s) to be referenced in the UFSARs.

For Open Item 3.0.3.9.1.2(a-g), the staff did not express concerns with the applicant's response. However, the staff requested that the applicant include an updated summary description of the Heat Exchanger Preventive Maintenance Activities in its formal response to reflect the references to governing codes or standards (provided in the handout) that will be used to determine the acceptance criteria for loss of material. Additionally, the staff requested that the applicant provide (in its formal response) additional information in its formal open item response to address the item identified by Duke as documented on page 11 of its handout. Specifically, the applicant indicated that since the centrifugal charging pumps were normally in service, the associated coolers should experience the most susceptible service environment for loss of material to occur. However, the staff was concerned that the stagnant water environment of a cooler that is usually not in service would be a more susceptible service environment for loss of material to occur. Therefore, the staff asked the applicant to explain (in its formal response) why a centrifugal charging pump oil cooler is an appropriate representative of the population of 16 coolers at McGuire, Units 1 and 2.

Prior to the meeting, the staff had independently reconsidered Open Item 3.0.3.13.2-1 and concluded that the applicant's approach was acceptable for the following reasons:

- (1) Corrosion of the outside surface of a buried pipe occurs at locations where the coating is damaged. Since this can happen anywhere along the pipe, the whole length of the pipe would need to be excavated to obtain meaningful information. However, this is not practical.
- (2) If a leak develops due to corrosion of the outside of a pipe (due to damage of the outside coating), the inside coating would also exhibit signs of damage. Therefore, inspection of the inside coating will reveal the location of the leak.
- (3) The degree of degradation of the inside coating can give some idea on the condition of the outside coating.
- (4) The sample of internal pipe to be inspected consists of about 90 percent of the population of piping governed by the Condenser Circulating Water System Internal Coating Inspection program. This significant sample size should yield valid, reliable results with a high degree of confidence.
- (5) The staff found a similar inspection program for Oconee acceptable.

Although the applicant had been informed of this decision before the meeting, the open item was addressed in its handout. Therefore, its resolution is explained in this summary.

For Open Item 3.0.3.15.2-1, the staff reviewed the proposed response and understood the applicant to state that it would rely on ultrasonic testing (UT) to identify localized corrosion. However, if a pinhole leak did occur, the applicant would perform an evaluation of the structural integrity of the piping to ensure that it would perform its intended function under all design basis conditions, in accordance with the appropriate design code and under guidance of NRC Generic Letter 90-05, "Guidance for Performing Temporary Non-Code Repair of ASME Code Class 1, 2, and 3 Piping." The applicant also indicated, in its proposed response, that UT would detect numerous occurrences of localized corrosion, which would be trended to maintain cognizance of the progression of material loss. However, the applicant did not address, in its

proposed response, if or how it would perform extent-of-condition evaluations. Specifically, the applicant did not describe the extent to which a trend would be sufficiently adverse to warrant an increase in inspection sample size. Therefore, the staff requested that the applicant provide this information in its formal response to the open item.

For Open Item 3.3.6.2-1, the staff did not express concerns with the applicant's response during the meeting, since it adequately addressed the potential for exposure to ultraviolet radiation. However, the staff subsequently considered other aging effects. The staff reviewed operating experience with other components (e.g., condenser expansion joints) fabricated from the same material and determined that they typically are replaced every 20 to 30 years, based upon degraded resiliency. In light of this operating experience, the staff considered the condenser circulating water system expansion joints, located in a yard environment, to be unlikely to complete a service life of up to 60 years. Subsequently, in a letter issued October 19, 2002, the staff requested that the applicant provide a technical basis to justify a service life of up to 60 years without aging management or replacement.

The staff did not express concerns about proposed responses to Open Items 3.3.17.2.1-1 or Open Item 3.3.35.2-1. However, for Open Item 3.4.1.2.2-1, the staff explained that the inspection to verify the effectiveness of the Chemistry Control Program needed to be a deliberate inspection with the explicit purpose of looking for and identifying signs of material loss. To be credited for license renewal, the inspection would need to specify a scope and sample locations that would yield results and findings representative of the secondary systems for which the chemistry control program is credited. The inspection and results also would need to be documented in such a way that they can be retrieved and audited during future NRC inspections. Because the applicant's proposed response does not address this, the staff indicated that it was inadequate in resolving the open item.

A draft of this meeting summary was provided to the applicant to allow them the opportunity to comment prior to the summary being issued.

*/RA/*

Rani L. Franovich, Project Manager  
License Renewal Section  
License Renewal and Environmental Impacts Program  
Division of Regulatory Improvement Programs  
Office of Nuclear Reactor Regulation

Docket Nos.: 50-413, 50-414, 50-369, and 50-370

Enclosures: As stated

cc w/encls: See next page

proposed response, if or how it would perform extent-of-condition evaluations. Specifically, the applicant did not describe the extent to which a trend would be sufficiently adverse to warrant an increase in inspection sample size. Therefore, the staff requested that the applicant provide this information in its formal response to the open item.

For Open Item 3.3.6.2-1, the staff did not express concerns with the applicant's response during the meeting, since it adequately addressed the potential for exposure to ultraviolet radiation. However, the staff subsequently considered other aging effects. The staff reviewed operating experience with other components (e.g., condenser expansion joints) fabricated from the same material and determined that they typically are replaced every 20 to 30 years, based upon degraded resiliency. In light of this operating experience, the staff considered the condenser circulating water system expansion joints, located in a yard environment, to be unlikely to complete a service life of up to 60 years. Subsequently, in a letter issued October 19, 2002, the staff requested that the applicant provide a technical basis to justify a service life of up to 60 years without aging management or replacement.

The staff did not express concerns about proposed responses to Open Items 3.3.17.2.1-1 or Open Item 3.3.35.2-1. However, for Open Item 3.4.1.2.2-1, the staff explained that the inspection to verify the effectiveness of the Chemistry Control Program needed to be a deliberate inspection with the explicit purpose of looking for and identifying signs of material loss. To be credited for license renewal, the inspection would need to specify a scope and sample locations that would yield results and findings representative of the secondary systems for which the chemistry control program is credited. The inspection and results also would need to be documented in such a way that they can be retrieved and audited during future NRC inspections. Because the applicant's proposed response does not address this, the staff indicated that it was inadequate in resolving the open item.

A draft of this meeting summary was provided to the applicant to allow them the opportunity to comment prior to the summary being issued.

**/RA/**

Rani L. Franovich, Project Manager  
License Renewal Section  
License Renewal and Environmental Impacts Program  
Division of Regulatory Improvement Programs  
Office of Nuclear Reactor Regulation

Docket Nos.: 50-413, 50-414, 50-369, and 50-370

Enclosures: As stated

cc w/encls: See next page

**DISTRIBUTION:**

See next page

Document Name: C:\ORPCheckout\FileNET\ML023240378.wpd

OFFICE	LA:RLEP:DRIP	PM:RLEP:DRIP	SC:RLEP:DRIP	TR:DE:EEIB
NAME	HBerilla	RLFranovich	SLee	AGill
DATE	11/07/02	11/7/02	11/18/02	11/13 /02
OFFICE	SC:EMCB	SC:EMCB	SC:EMEB	SC:SPLB
NAME	SCoffin	LLund	KManoly	SWeerakkody
DATE	11/ 13/02	11/13/02	11/13/02	11/15/02

DISTRIBUTION: Meeting with Duke Re: Catawba & McGuire, Dated: November 15, 2002

**Package: ML023220127**

**HARD COPY**

RLEP RF

R. Franovich

**E-MAIL:**

PUBLIC

J. Johnson

W. Borchardt

D. Matthews

F. Gillespie

RidsNrrDe

R. Barrett

E. Imbro

G. Bagchi

K. Manoly

W. Bateman

J. Calvo

C. Holden

P. Shemanski

H. Nieh

G. Holahan

H. Walker

S. Black

B. Boger

D. Thatcher

G. Galletti

C. Li

J. Moore

R. Weisman

M. Mayfield

A. Murphy

W. McDowell

S. Smith (srs3)

T. Kobetz

R. Assa

C. Munson

RLEP Staff

-----

K. Clark, RII

C. Julian, RII

PMNS

M. Kotzalas

S. Uttal

R. Haag, RII

C. Patel

R. E. Martin



ATTENDANCE LIST  
NRC STAFF MEETING WITH DUKE ENERGY CORPORATION  
SEPTEMBER 17 and 18, 2002

<u>NAME</u>	<u>ORGANIZATION</u>
September 17, 2002 (Electrical issues)	
1. Rani Franovich	NRC/NRR/DRIP/RLEP
2. Robert Gill	Duke Energy
3. Greg Robison	Duke Energy
4. Paul Colaianni	Duke Energy
5. Duc Nguyen	NRC/NRR/DE/EEIB
6. James Lazevnick	NRC/NRR/DE/EEIB
7. John Knox	NRC/NRR/DE/EEIB
8. Paul Gill	NRC/NRR/DE/EEIB
9. Paul Shemanski	NRC/NRR/DE/EEIB
September 17, 2002 (Reactor coolant system issues)	
1. Rani Franovich	NRC/NRR/DRIP/RLEP
2. Robert Gill	Duke Energy
3. Greg Robison	Duke Energy
4. Mary Hazeltine	Duke Energy
5. Jeff Gilreath	Duke Energy
6. Paul Colaianni	Duke Energy
7. Tom Alley	Duke Energy
8. David Whittaker	Duke Energy
9. Simon Sheng	NRC/NRR/DE/EMCB
10. James Medoff	NRC/NRR/DE/EMCB
11. Barry Elliot	NRC/NRR/DE/EMCB
12. Sam Lee	NRC/NRR/DRIP/RLEP
13. Stephanie Coffin	NRC/NRR/DE/EMCB
September 18, 2002 (Thermal fatigue issues)	
1. Rani Franovich	NRC/NRR/DRIP/RLEP
2. Robert Gill	Duke Energy
3. Greg Robison	Duke Energy
4. Mike Davis	Duke Energy
5. John Fair	NRC/NRR/DE/EMEB

ATTENDANCE LIST  
NRC STAFF MEETING WITH DUKE ENERGY CORPORATION

NAME

ORGANIZATION

September 18, 2002 (Structural issues)

1. Rani Franovich	NRC/NRR/DRIP/RLEP
2. Robert Gill	Duke Energy
3. Greg Robison	Duke Energy
4. Debra Keiser	Duke Energy
5. Sing Chu	Duke Energy
6. Stewart Bailey	NRC/NRR/DE/EMEB
7. Hansraj Ashar	NRC/NRR/DE/EMEB
8. David Jeng	NRC/NRR/DE/EMEB
9. Cliff Munson	NRC/NRR/DE/EMEB
10. Kamal Manoly	NRC/NRR/DE/EMEB
11. Harold Walker	NRC/NRR/DSSA/SPLB
12. Vince Klco	NRC/NRR/DSSA/SPLB

September 18, 2002 (Mechanical scoping and screening issues)

1. Rani Franovich	NRC/NRR/DRIP/RLEP
2. Robert Gill	Duke Energy
3. Greg Robison	Duke Energy
4. Rounette Nader	Duke Energy
5. Mike Semmler	Duke Energy
6. Paul Colaianni	Duke Energy
7. Daniele Oudinot	NRC/NRR/DSSA/SPLB
8. Harold Walker	NRC/NRR/DSSA/SPLB
9. Vince Klco	NRC/NRR/DSSA/SPLB

September 18, 2002 (Mechanical aging management issues)

1. Rani Franovich	NRC/NRR/DRIP/RLEP
2. Robert Gill	Duke Energy
3. Greg Robison	Duke Energy
4. Rounette Nader	Duke Energy
5. Mike Semmler	Duke Energy
6. Stephanie Coffin	NRC/NRR/DE/EMCB
7. Meena Khanna	NRC/NRR/DE/EMCB
8. John Tsao	NRC/NRR/DE/EMCB
9. Kris Parczewski	NRC/NRR/DE/EMCB
10. Carolyn Lauron	NRC/NRR/DE/EMCB
11. Bart Fu	NRC/NRR/DE/EMCB
12. Louise Lund	NRC/NRR/DE/EMCB

NRC STAFF LICENSE RENEWAL MEETING WITH DUKE TO DISCUSS  
SAFETY EVALUATION REPORT (SER) OPEN AND CONFIRMATORY ITEMS  
SEPTEMBER 17-19, 2002

Purpose: For the staff and the applicant (Duke) to discuss open items identified in the staff's SER that was issued August 14, 2002.

Desired Outcome: To ensure that the applicant understands the staff's informational needs; that the staff understands the applicant's rationale on certain issues; and that the path to resolution of open and confirmatory items is identified.

Agenda (times approximated)

**September 17, 2002**

- |    |                               |                  |                              |
|----|-------------------------------|------------------|------------------------------|
| 1. | Introduction                  | 10:00-10:05 a.m. | NRC-RLEP                     |
| 2. | Electrical issues             | 10:05-11:00 a.m. | NRC-EEIB<br>Duke             |
| 3. | Reactor coolant system issues | 12:30-4:45 p.m.  | NRC-EMCB<br>NRC-EMEB<br>Duke |
| 4. | Public participation          | 4:45-5:00 p.m.   | Stakeholders                 |

**September 18, 2002**

- |    |                        |                  |                  |
|----|------------------------|------------------|------------------|
| 5. | Thermal fatigue issues | 8:00-9:00 a.m.   | NRC-EMEB<br>Duke |
| 6. | Structural issues      | 9:15-11:20 a.m.  | NRC-EMEB<br>Duke |
| 7. | Public participation   | 11:20-11:30 a.m. | Stakeholders     |

-- Lunch Break --

- |     |   |                 |                              |
|-----|---|-----------------|------------------------------|
| 8.  | Mechanical scoping and screening issues | 12:30-1:15 p.m. | NRC-SPLB<br>Duke             |
| 9.  | Mechanical aging management issues      | 1:30-4:45 p.m.  | NRC-EMCB<br>NRC-EMEB<br>Duke |
| 10. | Public participation                    | 4:45-5:00 p.m.  | Stakeholders                 |

Enclosure 2

McGuire & Catawba Nuclear Stations, Units 1 and 2

Mr. G. R. Peterson  
Site Vice President  
Catawba Nuclear Station  
Duke Energy Corporation  
4800 Concord Rd.  
York, SC 29745

Mr. H. B. Barron  
Vice President, McGuire Site  
Duke Energy Corporation  
12700 Hagers Ferry Rd.  
Huntersville, NC 28078

Ms. Lisa F. Vaughn  
Legal Department (PBO5E)  
Duke Energy Corporation  
422 South Church St.  
Charlotte, NC 28201-1006

County Manager of Mecklenburg County  
720 East Fourth St.  
Charlotte, NC 28202

Mr. Michael T. Cash  
Regulatory Compliance Manager  
Duke Energy Corporation  
McGuire Nuclear Site  
12700 Hagers Ferry Rd.  
Huntersville, NC 28078

Anne Cottingham, Esquire  
Winston and Strawn  
1400 L Street, NW  
Washington, DC 20005

Senior Resident Inspector  
c/o U. S. Nuclear Regulatory  
Commission  
12700 Hagers Ferry Rd.  
Huntersville, NC 28078

Mr. Peter R. Harden, IV  
VP-Customer Relations and Sales  
Westinghouse Electric Company  
6000 Fairview Rd., 12th Floor  
Charlotte, NC 28210

Dr. John M. Barry  
Mecklenburg County  
Department of Environmental  
Protection  
700 N. Tryon St.  
Charlotte, NC 28202

County Manager of York County  
York County Courthouse  
York, SC 29745

Mr. Richard M. Fry, Director  
Division of Radiation Protection  
North Carolina Department of  
Environment, Health, and  
Natural Resources  
3825 Barrett Dr.  
Raleigh, NC 27609-7721

Ms. Karen E. Long  
Assistant Attorney General  
North Carolina Department of  
Justice  
P. O. Box 629  
Raleigh, NC 27602

Mr. C. Jeffrey Thomas  
Manager - Nuclear Regulatory  
Licensing  
Duke Energy Corporation  
526 South Church St.  
Charlotte, NC 28201-1006

NCEM REP Program Manager  
4713 Mail Service Center  
Raleigh, NC 27699-4713

Mr. T. Richard Puryear  
Owners Group (NCEMC)  
Duke Energy Corporation  
4800 Concord Rd.  
York, SC 29745

Mr. Gary Gilbert  
Regulatory Compliance Manager  
Duke Energy Corporation  
4800 Concord Rd.  
York, SC 29745

North Carolina Municipal Power  
Agency Number 1  
1427 Meadowwood Blvd.  
P. O. Box 29513  
Raleigh, NC 27626-0513

Piedmont Municipal Power Agency  
121 Village Dr.  
Greer, SC 29651

Saluda River Electric  
P. O. Box 929  
Laurens, SC 29360

North Carolina Electric Membership  
Corporation  
P. O. Box 27306  
Raleigh, NC 27611

Senior Resident Inspector  
4830 Concord Rd.  
York, SC 29745

Lou Zeller  
Blue Ridge Environmental  
Defense League  
P.O. Box 88  
Glendale Springs, NC 28629

Paul Gunter  
Nuclear Information &  
Resource Service  
1424 16th Street NW, Suite 404  
Washington, DC 20036

Don Moniak  
Blue Ridge Environmental Defense League  
Aiken Office  
P.O. Box 3487  
Aiken, SC 29802-3487

Mr. Kevin Cox  
The Huntersville Star  
P. O. Box 2542  
Huntersville, NC 28070

Mr. Robert L. Gill, Jr.  
Duke Energy Corporation  
Mail Stop EC-12R  
P. O. Box 1006  
Charlotte, SC 28201-1006

Mr. Henry J. Porter, Assistant Director  
Division of Waste Management  
Bureau of Land & Waste Management  
S.C. Dept of Health and Environ. Control  
2600 Bull St.  
Columbia, SC 29201-1708

Mr. L. A. Keller  
Duke Energy Corporation  
526 South Church St.  
Charlotte, NC 28201-1006

Mr. Gregory D. Robison  
Duke Energy Corporation  
Mail Stop EC-12R  
526 S. Church St.  
Charlotte, NC 28201-1006

Mary Olson  
Nuclear Information & Resource Service  
Southeast Office  
P.O. Box 7586  
Asheville, NC 28802

Mr. Alan P. Nelson  
Nuclear Energy Institute  
1776 I Street, N.W., Suite 400  
Washington, DC 20006-3708