Duke Energy®

D.M. JAMIL
Vice President

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

803 831 4251
803 831 3221 fax

June 5, 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

McGuire Nuclear Station Units, 1 and 2
Docket Nos. 50-369, 50-370

Catawba Nuclear Station Units, 1 and 2
Docket Nos. 50-413, 50-414

License Amendment Request Applicable to
Technical Specification 3.8.1,
"AC Sources-Operating,"
Surveillance Requirement 3.8.1.13

Pursuant to 10 CFR 50.90, Duke Power Company LLC d/b/a Duke Energy Carolinas, LLC (Duke) is requesting an amendment (LAR) to the McGuire Nuclear Station, Units 1 and 2, Technical Specifications (TS), and to the Catawba Nuclear Station, Units 1 and 2, TS. This LAR clarifies SR 3.8.1.13 and its associated Bases to state that the SR only verifies that non-emergency diesel generator (DG) trips are bypassed. It is based upon, and consistent with, Industry Technical Specification Task Force (TSTF), Standard Technical Specification Traveler, TSTF-400-A, Revision 1, "Clarify Surveillance Requirement on Bypass of DG Automatic Trips." TSTF-400-A, Revision 1 was approved by the NRC in a letter and a safety evaluation report dated November 13, 2004.

The contents of this submittal package are as follows:

- An Affidavit is included within the cover letter.
- Attachments 1a and 1b provide a marked copy of the existing McGuire and Catawba TS and Bases, respectively. The marked copies show the proposed changes.

A001

- Attachment 2 provides a Description of the Proposed Changes and Technical Justification.

- Pursuant to 10 CFR 50.92, Attachment 3 documents Duke's determination that this LAR contains No Significant Hazards Consideration.

- Pursuant to 10 CFR 51.22(c)(10), Attachment 4 provides the basis for the categorical exclusion of this LAR from the requirement to perform an environmental assessment or environmental impact statement.

Revised (clean) TS and Bases pages will be provided to the NRC at the time of issuance of the approved amendments.

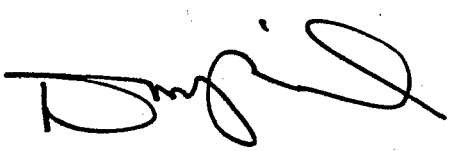
Duke is requesting NRC review and approval of this LAR by June 1, 2007. Duke has determined that the NRC's standard 30-day implementation grace period will be sufficient to implement this LAR.

Implementation of this LAR in the Facility Operating Licenses and TS will not impact the McGuire or Catawba Updated Final Safety Analysis Report (UFSAR).

Pursuant to 10 CFR 50.91, a copy of this LAR is being sent to the designated official of the State of North Carolina and the designated official of the State of South Carolina.

Inquiries on this matter should be directed to J. S. Warren at (704) 875-5171.

Very truly yours,



Dhiaa M. Jamil

xc w/Attachments:

W. D. Travers, Regional Administrator
U. S. Nuclear Regulatory Commission, Region II
Atlanta Federal Center
61 Forsyth St., SW, Suite 23T85
Atlanta, GA 30303

J. F. Stang (Addressee Only)
NRC Project Manager (MNS & CNS)
U. S. Nuclear Regulatory Commission
Mail Stop 8 H4A
Washington, DC 20555-0001

J. B. Brady
Senior Resident Inspector
U. S. Nuclear Regulatory Commission
McGuire Nuclear Site

E. F. Guthrie
Senior Resident Inspector
U. S. Nuclear Regulatory Commission
Catawba Nuclear Site

Beverly O. Hall, Section Chief
Radiation Protection Section
1645 Mail Service Center
Raleigh, NC 27699-1645

H. J. Porter, Director
Division of Radioactive Waste Management
South Carolina Bureau of Land and Waste Management
2600 Bull Street
Columbia, SC 29201

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

Subscribed and sworn to me: 6/5/06
Date

Notary Public

My commission expires: 7/2/2014
Date

SEAL

Attachment 1a

McGuire Units 1 and 2

Proposed Technical Specifications and Bases Changes

(Mark-up)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
SR 3.8.1.13 Verify each DG's automatic trips are bypassed on actual or simulated loss of voltage signal on the emergency bus concurrent with an actual or simulated ESF actuation signal except: a. Engine overspeed; b. Generator differential current; c. Low lube oil pressure; and d. Generator voltage - controlled overcurrent.	18 months
SR 3.8.1.14 ----------NOTES---------- 1. Momentary transients outside the load range do not invalidate this test. 2. DG loadings may include gradual loading as recommended by the manufacturer. ---------- Verify each DG, when connected to its bus in parallel with offsite power and operating with maximum kVAR loading that offsite power conditions permit, operates for ≥ 24 hours: a. For ≥ 2 hours loaded ≥ 4200 kW and ≤ 4400 kW; and b. For the remaining hours of the test loaded ≥ 3600 kW and ≤ 4000 kW.	18 months

(continued)

SURVEILLANCE REQUIREMENTS (continued)

The Frequency of 18 months is consistent with the recommendations of Regulatory Guide 1.9 (Ref. 3) Table 1, takes into consideration unit conditions required to perform the Surveillance, and is intended to be consistent with expected fuel cycle lengths.

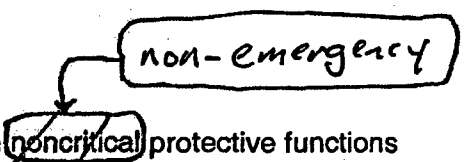
This SR is modified by two Notes. The reason for Note 1 is to minimize wear and tear on the DGs during testing. For the purpose of this testing, the DGs must be started from standby conditions, that is, with the engine coolant and oil continuously circulated and temperature maintained consistent with manufacturer recommendations. The reason for Note 2 is that performing the Surveillance would remove a required offsite circuit from service, perturb the electrical distribution system, and challenge safety systems.

SR 3.8.1.12

This Surveillance demonstrates that the DG automatically starts and achieves the required voltage and frequency within the specified time (11 seconds) from the design basis actuation signal (LOCA signal) and operates for ≥ 5 minutes. The 5 minute period provides sufficient time to demonstrate stability. SR 3.8.1.12.d ensures that the emergency bus remains energized from the offsite electrical power system on an ESF signal without loss of offsite power. This Surveillance also verified the tripping of non-essential loads. Tripping of non-essential loads is verified only once, either in this SR or in SR 3.8.1.19, since the same circuitry is tested in each SR.

The Frequency of 18 months is consistent with Regulatory Guide 1.9 (Ref. 3) Table 1 and takes into consideration unit conditions required to perform the Surveillance and is intended to be consistent with the expected fuel cycle lengths. Operating experience has shown that these components usually pass the SR when performed at the 18 month Frequency. Therefore, the Frequency was concluded to be acceptable from a reliability standpoint. This SR is modified by a Note. The reason for the Note is to minimize wear and tear on the DGs during testing. For the purpose of this testing, the DGs must be started from standby conditions, that is, with the engine coolant and oil continuously circulated and temperature maintained consistent with manufacturer recommendations.

SR 3.8.1.13



This Surveillance demonstrates that DG noncritical protective functions (e.g., high jacket water temperature) are bypassed on a loss of voltage

BASES

SURVEILLANCE REQUIREMENTS (continued)

signal concurrent with an ESF actuation test signal and critical protective functions (engine overspeed, generator differential current, low lube oil pressure, generator voltage-controlled overcurrent) trip the DG to avert substantial damage to the DG unit. The noncritical trips are bypassed during DBAs and provide an alarm on an abnormal engine condition. This alarm provides the operator with sufficient time to react appropriately. The DG availability to mitigate the DBA is more critical than protecting the engine against minor problems that are not immediately detrimental to emergency operation of the DG.

The 18 month Frequency is consistent with Regulatory Guide 1.9 (Ref. 3) Table 1, taking into consideration unit conditions required to perform the Surveillance, and is intended to be consistent with expected fuel cycle lengths. Operating experience has shown that these components usually pass the SR when performed at the 18 month Frequency. Therefore, the Frequency was concluded to be acceptable from a reliability standpoint.

This SR is not normally performed in MODE 1 or 2, but it may be performed in conjunction with periodic preplanned preventative maintenance activity that causes the DG to be inoperable. This is acceptable provided that performance of the SR does not increase the time the DG would be inoperable for the preplanned preventative maintenance activity.

SR 3.8.1.14

Regulatory Guide 1.9 (Ref. 3), paragraph 2.2.9, requires demonstration once per 18 months that the DGs can start and run continuously at full load capability for an interval of not less than 24 hours, ≥ 2 hours of which is at a load equivalent from 105% to 110% of the continuous duty rating and the remainder of the time at a load equivalent to the continuous duty rating of the DG. The DG starts for this Surveillance can be performed either from standby or hot conditions. The provisions for prelubricating and warmup, discussed in SR 3.8.1.2, and for gradual loading, discussed in SR 3.8.1.3, are applicable to this SR.

This Surveillance is performed with the DG connected to its bus in parallel with offsite power supply. The DG is tested under maximum kVAR loading, which is defined as being as close to design basis conditions as practical subject to offsite power conditions. Design basis conditions have been calculated to be greater than 0.9 power factor. During DG testing, equipment ratings are not to be exceeded (i.e., without creating an overvoltage condition on the DG or 4 kV emergency buses, over-excitation in the generator, or overloading the DG emergency feeder while maintaining the power factor greater than or equal to 0.9).

INSERT M1

Non-emergency automatic trips are all automatic trips except:

a. Engine overspeed;

b. Generator differential current;

c. Low lube oil pressure; and

d. Generator voltage - controlled overcurrent.

Attachment 1b

Catawba Units 1 and 2

Proposed Technical Specifications and Bases Changes

(Mark-up)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
SR 3.8.1.13 Verify each DG's automatic trips are bypassed on actual or simulated loss of voltage signal on the emergency bus concurrent with an actual or simulated ESF actuation signal, except: a. Engine overspeed; b. Generator differential current; c. Low - low lube oil pressure; and d. Voltage control overcurrent relay scheme.	18 months
SR 3.8.1.14 ----------NOTE---------- Momentary transients outside the load and power factor ranges do not invalidate this test. ---------- Verify each DG operating at a power factor $\leq$ 0.9 operates for $\geq$ 24 hours loaded $\geq$ 5600 kW and $\leq$ 5750 kW.	18 months

(continued)

SURVEILLANCE REQUIREMENTS (continued)

The Frequency of 18 months takes into consideration unit conditions required to perform the Surveillance and is intended to be consistent with the expected fuel cycle lengths. Operating experience has shown that these components usually pass the SR when performed at the 18 month Frequency. Therefore, the Frequency was concluded to be acceptable from a reliability standpoint. This SR is modified by a Note. The reason for the Note is to minimize wear and tear on the DGs during testing. For the purpose of this testing, the DGs must be started from standby conditions, that is, with the engine coolant and oil continuously circulated and temperature maintained consistent with manufacturer recommendations.

SR 3.8.1.13

This Surveillance demonstrates that DG noncritical protective functions (e.g., high jacket water temperature) are bypassed on a loss of voltage signal concurrent with an ESF actuation test signal and critical protective functions (engine overspeed, generator differential current, low-low lube oil pressure, voltage control overcurrent relay scheme) trip the DG to avert substantial damage to the DG unit. The noncritical trips are bypassed during DBAs and provide an alarm on an abnormal engine condition. This alarm provides the operator with sufficient time to react appropriately. The DG availability to mitigate the DBA is more critical than protecting the engine against minor problems that are not immediately detrimental to emergency operation of the DG.

non-emergency

INSERT C1

The 18 month Frequency is based on engineering judgment, taking into consideration unit conditions required to perform the Surveillance, and is intended to be consistent with expected fuel cycle lengths. Operating experience has shown that these components usually pass the SR when performed at the 18 month Frequency. Therefore, the Frequency was concluded to be acceptable from a reliability standpoint.

SR 3.8.1.14

Regulatory Guide 1.108 (Ref. 10), paragraph 2.a.(3), requires demonstration once per 18 months that the DGs can start and run

INSERT C1

Non-critical automatic trips are all automatic trips except:

a. Engine overspeed;

b. Generator differential current;

c. Low - low lube oil pressure; and

d. Voltage control overcurrent relay scheme.

Attachment 2

Description of Proposed Changes and Technical Justification

DESCRIPTION

This license amendment request (LAR) proposes a change to the McGuire Nuclear Station, Units 1 and 2, and the Catawba Nuclear Station, Units 1 and 2, Technical Specifications (TS) 3.8.1, "AC Sources-Operating," Surveillance Requirement (SR) 3.8.1.13. This SR currently states:

For McGuire

"Verify each DG's automatic trips are bypassed on actual or simulated loss of voltage signal on the emergency bus concurrent with an actual or simulated ESF actuation signal except:

a. Engine overspeed;

b. Generator differential current;

c. Low lube oil pressure; and

d. Generator voltage-controlled overcurrent."

For Catawba

"Verify each DG's automatic trips are bypassed on actual or simulated loss of voltage signal on the emergency bus concurrent with an actual or simulated ESF actuation signal except:

a. Engine overspeed;

b. Generator differential current;

c. Low - low lube oil pressure; and

d. Voltage-control overcurrent relay scheme."

This change clarifies SR 3.8.1.13 and the associated Bases to state that the SR verifies that only the diesel generator (DG) non-emergency trips are bypassed.

Attachment 2

Description of Proposed Changes and Technical Justification

TECHNICAL JUSTIFICATION

Discussion

The current SR 3.8.1.13 and Bases imply that two tests are required: 1) verification that non-emergency trips are bypassed, and 2) verification that emergency trips are not bypassed. This is not correct and has led to confusion at nuclear power plants implementing the SR. Only the first verification is the correct intent of this SR. In order to address this confusion the nuclear industry's Technical Specification Task Force (TSTF) proposed a Standard Technical Specification Traveler, TSTF-400-A, Revision 1, "Clarify Surveillance Requirement on Bypass of DG Automatic Trips," (Reference 1). The NRC approved TSTF-400-A, Revision 1 by letter and a safety evaluation report (SER) dated November 13, 2004 (Reference 2). Duke has reviewed the changes proposed in TSTF-400-A, Revision 1, its supporting material, and the NRC SER, and has determined and documented that it applies to McGuire and Catawba. Therefore, TSTF-400-A, Revision 1, is referenced as the basis for the changes proposed within this McGuire and Catawba LAR.

Duke is making one editorial deviation from TSTF-400 in that this LAR package uses the terms "emergency" trips and "non-emergency" trips in lieu of "critical" trips and "non-critical" trips for both McGuire and Catawba. This is being done for human factors considerations because both stations use these terms in operator training and on labeling installed on the actual DG equipment. This deviation does not affect the technical aspects of this proposed change.

Applicable Regulatory Criteria

The NRC regulations related to the content of nuclear power plants' TS are contained in 10 CFR 50.36. Following implementation of the changes proposed in this LAR, the McGuire and Catawba TS will continue to comply with this regulation. This LAR is being submitted to the NRC for review and approval consistent with the agency's regulations contained in 10 CFR 50.90. The proposed

changes to McGuire and Catawba SR 3.8.1.13 have been developed in accordance with an NRC-approved TSTF Standard Technical Specification Traveler (see References 1 and 2). The changes contained in the traveler clarify the requirements of SR 3.8.1.13 and have been determined to be acceptable on the basis that the SR applies only to non-emergency DG trips. The proposed changes to this SR have been evaluated by Duke and determined to have no adverse impact on the McGuire or Catawba DGs and related electrical systems' ability to fulfill their design basis function as required by 10 CFR 50, Appendix A, GDC-17.

Conclusion

Duke has evaluated the proposed changes to SR 3.8.1.13 and its associated Bases and the supporting industry document TSTF-400-A, Revision 1, as discussed above, and has determined that these are appropriate for implementation at McGuire and Catawba Nuclear Stations.

REFERENCES

1. Industry Technical Specification Task Force (TSTF), Standard Technical Specifications Traveler, TSTF-400-A, Revision 1, "Clarify Surveillance Requirement on Bypass of DG Automatic Trips."
2. Letter and Safety Evaluation Report, Thomas H. Boyce, U. S. Nuclear Regulatory Commission, to the Technical Specification Task Force, Dated November 13, 2004.

Attachment 3

No Significant Hazards Consideration Determination

Duke Power Company d/b/a Duke Energy Carolinas, LLC (Duke) has made the determination that this license amendment request (LAR) involves No Significant Hazards Consideration through the application of the standards established by the NRC's regulations in 10 CFR 50.92. These three standards are discussed below.

1. Would implementation of the changes proposed in this LAR involve a significant increase in the probability or consequences of an accident previously evaluated?

   No. This LAR clarifies the purpose of Surveillance Requirement (SR) 3.8.1.13, which is to verify that non-emergency automatic diesel generator (DG) trips are bypassed in an accident. The DG automatic trips and their bypasses are not initiators of any accident that has been previously evaluated. Therefore, the probability of any of these accidents is not significantly increased. The function of the DG in mitigating accidents is not changed. The revised SR continues to ensure that the DG will operate as assumed in the accident analyses. Therefore, the consequences of any accident previously evaluated are not affected as well.

2. Would implementation of the changes proposed in this LAR create the possibility of a new or different kind of accident from any accident previously evaluated?

   No. The changes proposed in this LAR only clarify the purpose of SR 3.8.1.13, which is to verify that non-emergency automatic DG trips are bypassed in an accident. The proposed change does not involve a physical change to the plant (no new or different type of equipment will be installed) or a change in the methods governing normal plant operation or testing. Thus, the changes proposed in this LAR do not create the possibility of a new or different kind of accident from any accident previously evaluated.

Attachment 3

No Significant Hazards Consideration Determination

3. Would implementation of the changes proposed in this LAR involve a significant reduction in a margin of safety?

   No. The changes proposed in this LAR only clarify the purpose of SR 3.8.1.13, which is to verify that non-emergency automatic DG trips are bypassed in an accident. These changes clarify the purpose of the SR, which is to verify that the DG is capable of performing its assumed safety function. The safety function of the DG is unaffected, so the changes do not affect the margin of safety. Therefore, this LAR does not involve a significant reduction in a margin of safety.

Conclusion

Based upon the preceding discussion, Duke has concluded that this proposed amendment does not involve a significant hazards consideration.

Attachment 4

Environmental Assessment/Impact Statement

A review of this license amendment request has determined it would change a requirement with respect to the installation or use of a facility component located within the restricted area, as defined in 10 CFR 20. However, the proposed changes do not involve: (i) a significant hazards consideration (see Attachment 3), (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed changes meet the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with this license amendment request.