



Duke Energy Corporation

Oconee Nuclear Station
P.O. Box 1439
Seneca, SC 29679

(864) 885-3107 OFFICE
(864) 885-3564 FAX

W. R. McCollum, Jr.
Vice President

January 25, 1999

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

SUBJECT: Duke Energy Corporation
Docket No(s). 50-269, -270, -287
Oconee Nuclear Station Units 1, 2, and 3
Proposed Amendment to the Facility Operating
License Regarding the High Pressure Injection
System Requirements
Technical Specification Change # 98-13

On December 16, 1998, Duke submitted a license amendment request (LAR) pursuant to 10 CFR 50.90 for Facility Operating License Nos. DPR-38, DPR-47, and DPR-55 for Oconee Nuclear Station Units 1, 2, and 3, respectively. The LAR corrects previously identified deficiencies in the Technical Specifications related to the High Pressure Injection (HPI) system. This submittal revises the no significant hazards determination associated with the December 16, 1998, LAR. This revision:

4/
Avo,

- 1) fulfills a verbal request made by the NRC Project Manager on January 7, 1999, to include additional justification for why the LAR does not create the possibility of a new or different kind of accident from any kind of accident previously evaluated; and
- 2) enhances the justification for why the LAR does not involve a significant increase in the probability or consequences of an accident previously evaluated to minimize the potential for misinterpretation.

Pursuant to 10 CFR 50.91, a copy of the revised no significant hazards consideration is being sent to the State of South Carolina.

020082

9902030011	990125
PDR	ADOCK 05000269
P	PDR

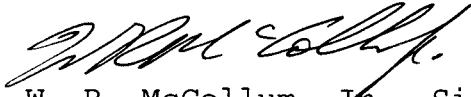
U. S. Nuclear Regulatory Commission

January 25, 1999

Page 2

Inquiries on this matter should be directed to J. E. Burchfield, Jr. at (864) 885-3292.

Very truly yours,



W. R. McCollum, Jr., Site Vice President
Oconee Nuclear Site

Attachment

xc w/attachments:

L. A. Reyes
U. S. NRC
Regional Administrator, Region II
Atlanta Federal Center
61 Forsyth St., SW, Suite 23T85
Atlanta, GA 30303

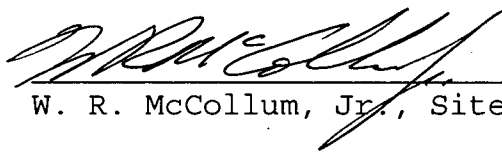
D. E. LaBarge
NRC Senior Project Manager (ONS)
U. S. Nuclear Regulatory Commission
Mail Stop O-14H25
Washington, DC 20555-0001

M. A. Scott
Senior Resident Inspector (ONS)
U. S. Nuclear Regulatory Commission
Oconee Nuclear Site

V. R. Autry, Director
Division of Radioactive Waste Management
Bureau of Land & Waste Management
Department of Health & Environmental Control
2600 Bull Street
Columbia, SC 29201

AFFIDAVIT

W. R. McCollum, Jr., being duly sworn, states that he is Site Vice President of Duke Energy Corporation; that he is authorized on the part of said corporation to sign and file with the Nuclear Regulatory Commission this revision to the Oconee Nuclear Station License Nos. DPR-38, DPR-47, and DPR-55; and that all statements and matters set forth therein are true and correct to the best of his knowledge.



W. R. McCollum, Jr., Site Vice President

Subscribed and sworn to me: 1-25-99
Date

Notary Public: Connie M. Breazale

My Commission Expires: 2-12-2003
Date

SEAL

Attachment 1

No Significant Hazards Determination

Pursuant to 10 CFR 50.91, Duke Power Company (Duke) has made the determination that this amendment request involves a No Significant Hazards Consideration by applying the standards established by the NRC regulations in 10 CFR 50.92. This ensures that operation of the facility in accordance with the proposed amendment would not:

- (1) Involve a significant increase in the probability or consequences of an accident previously evaluated:

No. The proposed changes do not involve a physical alteration of the plant. No new or different equipment is being installed, and no installed equipment is being operated in a new or different manner. No set points for parameters which initiate protective or mitigative action are being changed.

The proposed changes do not have any impact upon the ability of the HPI System to add soluble poison to the Reactor Coolant System. The remaining potential impact is upon the ability to mitigate the consequences of a small break LOCA, which is addressed below. The small break LOCA is the limiting design basis accident with respect to HPI System operability requirements.

The Technical Specification requirements for the HPI System are supported by a spectrum of small break LOCA analyses based on the approved Evaluation Model described in FTI topical report BAW-10192PA. These small break LOCA analyses demonstrate that the acceptance criteria of 10 CFR 50.46 are satisfied.

The requirements of LCO 3.5.2 assure that flow can be provided via two HPI trains (i.e., one HPI train responds automatically upon an ESPS signal, and the second HPI train is aligned within 10 minutes via operator actions in the Control Room) following a small break LOCA and a single active failure. The full power small break LOCA analyses supporting this proposed license amendment have been performed in accordance

with the approved Evaluation Model described in FTI topical report BAW-10192P.

If enhanced steam generator cooling is not credited in the accident analysis, two HPI trains are required to mitigate specific small break LOCAs with Thermal Power \leq 75% RTP. However, if equipment not qualified as QA-1 (i.e., an ADV flow path for one steam generator) is credited for enhanced steam generator cooling, the safety analyses have determined that the capacity of one HPI train is sufficient to mitigate a small break LOCA on the discharge of the reactor coolant pumps if Thermal Power \leq 75% RTP. An ADV flow path for each steam generator is credited as a compensatory measure in Actions B and C of LCO 3.5.2 to permit operation to continue with THERMAL POWER \leq 75% RTP: a) for 30 days with an HPI pump or one or more HPI discharge crossover valve(s) inoperable; and b) for 72 hours with one HPI train inoperable. This provides additional defense-in-depth, because the ADV flow path for each steam generator is required to be operable while only one is needed to perform the function. Additionally, a risk-informed assessment (provided as Attachment 7 to Duke's license amendment request dated December 18, 1998) concluded that operating the plant in accordance with the Required Actions was acceptable.

The proposed changes involve crediting an additional operator action (i.e., steaming that steam generator through an ADV flow path) that has not previously been reviewed and approved by the staff for licensing basis small break LOCA analyses. Additionally, while the EFW System has been credited in past SBLOCA analyses as described in responses to NUREG-0565, actions to raise steam generator levels to the loss of subcooled margin setpoint were only assumed in the smaller SBLOCAs. These operator actions have been included in the Emergency Operating Procedure (i.e., AP/1, 2, or 3/A/1800/001) for many years.

The times for completing these operator actions (i.e., feeding a steam generator via EFW and steaming that steam generator through an ADV flow path) are new to

the small break LOCA analysis and the licensing basis, and are considered reasonable. Crediting the performance of these operator actions within the specified time frames in the SBLOCA analyses does not result in any substantive change to the operator's response to a SBLOCA.

In summary, the technical analyses described in this license amendment justify the adequacy of this specification and assure that operability of the HPI System is maintained in a manner consistent with the requirements of the design basis accidents. Therefore, it is concluded that this amendment request will not significantly increase the probability or consequences of an accident previously evaluated.

- (2) Create the possibility of a new or different kind of accident from any kind of accident previously evaluated:

No. The proposed changes do not involve a physical alteration of the plant. No new or different equipment is being installed, and no installed equipment is being operated in a new or different manner. No set points for parameters which initiate protective or mitigative action are being changed. As a result, no new failure modes are being introduced.

The requirements of ITS 3.5.2 continue to assure that operability of the HPI System is maintained in a manner consistent with the requirements of the design basis accidents. The requirements are supported by small break LOCA analyses which demonstrate that the acceptance criteria of 10 CFR 50.46 are satisfied.

The proposed changes involve crediting an additional operator action (i.e., steaming that steam generator through an ADV flow path) that has not previously been reviewed and approved by the staff for licensing basis small break LOCA analyses. Additionally, while the EFW System has been credited in past SBLOCA analyses as described in responses to NUREG-0565, actions to raise steam generator levels to the loss of subcooled margin

setpoint were only assumed in the smaller SBLOCAs. These operator actions have been included in the Emergency Operating Procedure (i.e., AP/1, 2, or 3/A/1800/001) for many years.

The times for completing these operator actions (i.e., feeding a steam generator via EFW and steaming that steam generator through an ADV flow path) are new to the small break LOCA analysis and the licensing basis, and are considered reasonable. Crediting the performance of these operator actions within the specified time frames in the SBLOCA analyses does not result in any substantive change to the operator's response to a SBLOCA.

Therefore, this proposed amendment will not create the possibility of any new or different kind of accident.

(3) Involve a significant reduction in a margin of safety.

No. The requirements of ITS 3.5.2 continue to assure that operability of the HPI System is maintained in a manner consistent with the requirements of the design basis accidents. The requirements are supported by small break LOCA analyses which demonstrate that the acceptance criteria of 10 CFR 50.46 are satisfied. These analyses were performed in accordance with the Evaluation Model described in FTI topical report BAW-10192P.

Therefore, it is concluded that the proposed amendment request will not result in a significant decrease in the margin of safety.

Duke has concluded, based on the above, that there are no significant hazards considerations involved in this amendment request.