September 25, 2006

Mr. Dhiaa Jamil
Vice President
Catawba Nuclear Station
Duke Power Company LLC
4800 Concord Road
York, SC 29745

SUBJECT: CATAWBA NUCLEAR STATION, UNITS 1 AND 2, ISSUANCE OF AMENDMENTS REGARDING APPROVAL OF CHANGES TO THE UPDATED FINAL SAFETY ANALYSIS REPORT AND EMERGENCY OPERATING PROCEDURES (TAC NOS. MC7459 AND MC7460)

Dear Mr. Jamil:

The Nuclear Regulatory Commission (NRC) has issued the enclosed Amendment No. 231 to Renewed Facility Operating License NPF-35 and Amendment No. 227 to Renewed Facility Operating License NPF-52 for the Catawba Nuclear Station, Units 1 and 2, respectively. The amendments request approval of changes to the Updated Final Safety Analysis Report (UFSAR) and emergency operating procedures in response to your application dated June 29, 2005, as supplemented May 1, 2006.

The amendments approve a revision to the UFSAR report and the emergency operating procedures to allow an additional operator action to manually start one containment air return fan in the air return system in response to NRC Bulletin 2003-01, “Potential Impact of Debris Blockage on Emergency Sump Recirculation at Pressurized-Water Reactors,” June 6, 2003.

A copy of the related Safety Evaluation is also enclosed. A Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,

/RA/

John Stang, Senior Project Manager
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-413 and 50-414

Enclosures:
1. Amendment No. 231 to NPF-35
2. Amendment No. 227 to NPF-52
3. Safety Evaluation

cc w/encls: See next page

A copy of the related Safety Evaluation is also enclosed. A Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

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DUKE POWER COMPANY LLC

NORTH CAROLINA ELECTRIC MEMBERSHIP CORPORATION

SALUDA RIVER ELECTRIC COOPERATIVE, INC.

DOCKET NO. 50-413

CATAWBA NUCLEAR STATION, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 231
Renewed License No. NPF-35

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment to the Catawba Nuclear Station, Unit 1 (the facility) Renewed Facility Operating License No. NPF-35 filed by the Duke Power Company LLC, acting for itself, North Carolina Electric Membership Corporation and Saluda River Electric Cooperative, Inc. (licensees), dated June 29, 2005, as supplemented May 1, 2006, and complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations as set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, by Amendment No. 231, Renewed Facility Operating License No. NPF-35 is hereby amended to authorize changes to the Updated Final Safety Analysis Report (UFSAR) and emergency operating procedures to allow operator action to mitigate the effects of debris accumulation in the containment sump following a small break loss-of-coolant accident, as set forth in the license amendment application dated June 29, 2005, as supplemented May 1, 2006, and evaluated in the enclosed safety evaluation. The licensee shall update the UFSAR by adding a description of this change and shall change the emergency operating procedure, as authorized by this amendment, and in accordance with 10 CFR 50.59 and 10 CFR 50.71(e).

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA by RMartin for/

Evangelos C. Marinos, Chief
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to License No. NPF-35

Date of Issuance: September 25, 2006

DUKE POWER COMPANY LLC

NORTH CAROLINA MUNICIPAL POWER AGENCY NO. 1

PIEDMONT MUNICIPAL POWER AGENCY

DOCKET NO. 50-414

CATAWBA NUCLEAR STATION, UNIT 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 227
Renewed License No. NPF-52

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment to the Catawba Nuclear Station, Unit 2 (the facility) Renewed Facility Operating License No. NPF-52 filed by the Duke Power Company LLC, acting for itself, North Carolina Municipal Power Agency No. 1 and Piedmont Municipal Power Agency (licensees), dated June 29, 2005, as supplemented May 1, 2006, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations as set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (I) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, by Amendment No. 227, Renewed Facility Operating License No. NPF-52 is hereby amended to authorize changes to the Updated Final Safety Analysis Report (UFSAR) and emergency operating procedures to allow operator action to mitigate the effects of debris accumulation in the containment sump following a small break loss of coolant accident, as set forth in the license amendment application dated June 29, 2005, as supplemented May 1, 2006, and evaluated in the enclosed evaluation. The licensee shall update the UFSAR by adding a description of this change and shall change the emergency operating procedure, as authorized by this amendment, and in accordance with 10 CFR 50.59 and 10 CFR 50.71(e).

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA by RMartin for/

Evangelos C. Marinos, Chief
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to License No. NPF-52

Date of Issuance: September 25, 2006

ATTACHMENT TO LICENSE AMENDMENT NO. 231

RENEWED FACILITY OPERATING LICENSE NO. NPF-35

DOCKET NO. 50-413

AND

LICENSE AMENDMENT NO. 227

RENEWED FACILITY OPERATING LICENSE NO. NPF-52

DOCKET NO. 50-414

Replace the following pages of the Renewed Facility Operating Licenses and the Appendix A Technical Specifications (TSs) with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove	Insert
License Pages	License Pages
NPF-35 page 4	NPF-35 page 4
NPF-52 page 4	NPF-52 page 4

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO

AMENDMENT NO. 231 TO RENEWED FACILITY OPERATING LICENSE NPF-35

AND

AMENDMENT NO. 227 TO RENEWED FACILITY OPERATING LICENSE NPF-52

DUKE POWER COMPANY LLC

CATAWBA NUCLEAR STATION, UNITS 1 AND 2

DOCKET NOS. 50-413 AND 50-414

1.0 INTRODUCTION

By application dated June 29, 2005, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML051890090), as supplemented by letter dated May 1, 2006, (ADAMS Accession No. ML061290577), Duke Power Company LLC (Duke, the licensee), requested approval of changes to the Updated Final Safety Analysis Report (UFSAR), the Bases to Technical Specifications Section 3.6.11, "Air Return System (ARS)," and emergency operating procedures for the Catawba Nuclear Station, Units 1 and 2 (Catawba 1 and 2). The supplement dated May 1, 2006, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the staff's original proposed no significant hazards consideration determination as published the *Federal Register* on October 25, 2005 (70 FR 61657).

The amendments authorize revisions to the UFSAR, the Bases to Technical Specifications Section 3.6.11, "Air Return System (ARS)," and emergency operating procedures to allow an additional operator action to manually start one containment air return fan in the air return system in response to Nuclear Regulatory Commission (NRC) Bulletin 2003-01, "Potential Impact of Debris Blockage on Emergency Sump Recirculation at Pressurized-Water Reactors," June 6, 2003. This is an additional manual operator action to prevent or delay reaching the containment hi-hi pressure setpoint (3 psig) for containment spray initiation. This would minimize the amount of spray water available to transport debris to the containment sump, and subsequent sump screen debris build-up, as well as delay emergency core cooling system (ECCS) and containment spray swap-over from the refueling water storage tank to the containment sump.

2.0 REGULATORY EVALUATION

The safety-related ARS is designed to assure the rapid return of air from the upper to the lower containment compartment after the initial blowdown following a design basis accident (DBA). The return of this air to the lower compartment and subsequent recirculation back through the

ice condenser assists in cooling the containment atmosphere and limiting the post-accident containment pressure and temperature to less than design values. Limiting the pressure and temperature reduces the release of fission product radioactivity from containment to the environment in the event of a DBA.

The licensee could have made the proposed change to the Bases of the Catawba Technical Specifications under 10 CFR 50.59 without prior NRC approval, except for the use of GOTHIC in a different way (to analyze the containment response to small break loss-of-coolant accidents (LOCAs)) than previously approved in the licensing bases for these plants. Therefore, the NRC staff concentrated on this area of the review. The results of this review are documented in this safety evaluation.

The ARS consists of two separate trains of equal capacity, each capable of meeting the design bases. Each train includes a 100% capacity air return fan, and associated motor-operated damper in the fan discharge line to the containment lower compartment. The damper acts as a barrier between the upper and lower compartments to prevent reverse flow which would bypass the ice condenser. The damper is normally closed and remains closed throughout the initial blowdown following a postulated high-energy line break. The damper motor is actuated several seconds after the containment hi-hi pressure setpoint is reached and a start permissive from the containment pressure control system is present. In addition to the motor-operated damper, a backdraft damper is also provided at the discharge of each fan to serve as a check valve. Each train is powered from a separate engineered safety feature bus.

The applicable regulations and requirements of Title 10 of the *Code of Federal Regulation* (10 CFR), Part 50, Appendix A, General Design Criteria (GDC) that relate to these amendments are:

> GDC 16, "Containment design," which requires that the reactor containment and associated systems provide an essentially leak-tight barrier against the uncontrolled release of radioactivity to the environment.
>
> GDC 38, "Containment heat removal," which requires that a system be provided to remove heat from the reactor containment.
>
> GDC 50, "Containment design basis," which requires that the reactor containment structure be designed with conservatism to accommodate applicable design parameters (pressure, temperature, leakage rate).

Technical Specification (TS) 3.6.11 for the ARS satisfies Criterion 3 of 10 CFR 50.36(c)(2)(ii)(c), for a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

The evaluation performed by the licensee in support of the amendments was used to demonstrate that the containment acceptance criteria in the current licensing basis will continue to be met following implementation of the proposed changes.

3.0 TECHNICAL EVALUATION

The amendments request approval of a manual operator action to start one ARS fan early in an event where the containment pressure is greater than 1 psig and less than 3 psig following a reactor trip or safety injection. This action would only be taken if a pressurizer power-operated relief valve did not close, if the steam/feedwater lines were not intact, or if the reactor coolant system was not intact. For these conditions, manually starting a fan early to force air and steam through the ice condenser would reduce the rate of containment pressure increase. This could prevent or delay reaching the initiation pressure setpoint for containment spray actuation and potential problems with subsequent sump debris build-up. In addition, this could delay or prevent swap over from the refueling water storage tank to the containment sump for long-term recirculation containment cooling.

Manual operation of the ARS fan will not interfere with the automatic containment hi-hi pressure signal and the ARS fan start sequence and operation during a DBA. The automatic operation of the ARS would still function as described in the UFSAR if a containment hi-hi pressure signal is received, including load sequencing of the diesel generator. The propagation of a small-break LOCA into a large-break LOCA was considered by the licensee to be outside the design bases in accordance with ANSI N18.2-1973,[1] Section 2.1.3.3 as described in the licensee's UFSAR.

The licensee performed small-break LOCA studies with a modified version of the GOTHIC 4.0/DUKE large-break LOCA model to evaluate the containment response to small breaks. These studies were used to determine the range of small-break LOCAs which would pressurize the containment to greater than 1 psig and which would not result in a pressure greater than 3 psig in less than 10 minutes. Small-break LOCAs are not limiting DBAs for the purpose of demonstrating compliance with GDCs 16, 38 and 50. The mass and energy releases from small-break LOCAs into the containment are less than those from the limiting large-break LOCA and do not result in the maximum containment pressure or temperature.

GOTHIC error reports are issued by Numerical Applications, Inc., the code developer, on a quarterly basis. The reports are reviewed by the licensee to determine if any of the errors are applicable to GOTHIC Version 4.0/DUKE. Only a very small number of errors have been applicable to GOTHIC versions which date as far back as Version 4.0. The licensee has determined that none have resulted in a need to change any of the licensee's models.

The initiation pressure setpoint for the containment spray is 3 psig. The proposed manual action will not change the spray initiation setpoint or actuation. Therefore, the containment response to the limiting DBAs is not affected and the requirements of GDCs 16, 38 and 50 will continue to be met.

The licensee did not consider credit for operator action in less than 10 minutes. The licensee did consider early and late operator action when evaluating the containment conditions when the one containment air return fan in the ARS would be started. To ensure stable operation of the fan, there needs to be a flow path from the lower containment to the upper containment

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[1] ANSI (American National Standards Institute) 51.1/ANSI N18.2-1973, Nuclear Safety Criteria for the Design of Stationary Pressurized-Water Reactor Plants.

through the ice condenser intermediate deck doors (IDDs), top deck blankets and top deck curtains. In addition, the differential pressure between the upper and lower containment needs to remain below the isolation damper actuator and ARS fan design limit of 0.5 psid.

3.1 GOTHIC 4.0/DUKE Small-break LOCA Model

The NRC approved GOTHIC 4.0/DUKE containment analysis code was used for these studies. The code and the approved model (volume and flow paths used to represent the containment and the containment cooling systems) was designed to simulate the containment response to large-break LOCA and main steamline break events. Several modifications were made to adapt the existing model to evaluate small-break LOCAs. The small-break LOCA model used for this license amendment request is not intended to be used for a DBA evaluation but to support an operator action. Therefore, it is reasonable to include normal (nonsafety-related) systems which would not generally be credited for DBA studies. Four changes were made to the large-break LOCA GOTHIC mode:

(1) The addition of a flow path to model the vent curtains. Along the containment wall periphery of the top deck, vent curtains are provided to permit air flow in either direction to accommodate momentary pressure imbalances during normal operation. The vent curtain flow path is parallel to the IDDs and top deck blankets' flow path. The IDDs open rapidly during a DBA and the smaller flow area of the vent curtain flow paths are not important for the large-break LOCA evaluation. The operation of the vent curtains to provide a flow path for the fan operation is important for this small-break LOCA study.

(2) The modeling of the IDDs as an initially closed flow path. The IDDs themselves were not modeled in the large-break LOCA simulation model, since they would open instantaneously as a result of the large blowdown forces. For small-break LOCAs, the IDDs were modeled to open when sufficient differential pressure across the doors occurred. The differential pressure needed to open the IDDs was determined to be less than 0.08 psid. The top deck blankets would also be required to open to relieve the pressure, if the top deck vent curtains are insufficient to handle the transient. The differential pressure necessary to open the top deck blankets was also determined to be less than 0.08 psid.

(3) For the small-break LOCA evaluation, an additional axial node was added to the lower containment region to provide a more representative calculation of the pressure differential across the lower inlet doors to simulate the door behavior when the pressure differential across the lower inlet doors decreases to a small value, or becomes slightly negative. This level of nodalization detail was not necessary to provide a reasonable containment response for the large-break LOCA simulation.

(4) The lower containment ventilation system was modeled for the small-break LOCA evaluation. This system was not part of the large-break LOCA model. This system is used to maintain containment temperatures within TS limits during normal operation and is not a safety-related system.

In addition, representative small-break LOCA mass and energy release information was used to evaluate the containment responses to these smaller breaks. The mass release rates were

estimated based on previous calculations performed with the RELAP5/MOD3.1DUKE[2] computer code. Energy releases corresponding to the energy content of reactor coolant system inventory at hot full power were assumed. As the reactor coolant system depressurizes, the mass release rate was assumed to slowly decrease. The exact values of the mass and energy release boundary conditions are not important since a range of cases were considered to bound the small-break LOCA response. The NRC staff agrees with the licensee's method which covered a range of conditions expected for small-break LOCAs because the analyses are not intended to be representative of specific breaks but to provide information on the containment response to these breaks in support of these amendments.

The licensee had not previously used GOTHIC to evaluate the containment response to small-break LOCAs. In response to the NRC staff request, the licensee described the expected containment response to small-break LOCAs and the licensee's assessment of the GOTHIC analyses to support using the code and modified model for small-break LOCA evaluations. For the range of break sizes evaluated for these amendments, the licensee expected the containment response would be fairly slow-moving, with pressures and temperatures changing at fairly slow rates. The containment pressure for these breaks would reach 1 psig, but would not reach 3 psig in the time frame the operator would manually start one of the ARS fans, 10 minutes into the transient. Some ice melting would be expected, but not a significant amount. Some ice condenser lower inlet doors, on the opposite side of containment from the break location, would not open. The inlet doors in the vicinity of the assumed break location would open, providing adequate flow area to vent the steam from the pipe break into the ice bed.

The licensee determined that the overall containment response as observed in the GOTHIC analyses was consistent with these expectations. The model for the lower containment region was adequate to capture the expected temperature profile resulting from the small pipe break. The warmer air/steam mixture rose to the top of lower containment, with much of the steam passing through the lower ice condenser inlet doors. The pressurization to 1 psig forced some of this air/steam mixture into the dead-ended compartments outside the crane wall, and a limited amount through the deck leakage flow paths into the upper containment, as well as into the ice condenser. Within the ice condenser 100% of the steam was condensed on the ice surfaces, with the air passing through. The pressurization caused by this air resulted in a force applied to the IDDs. For some breaks, this force was sufficient to cause some of these doors to open. For others, the air passed through the vent curtain flow paths without opening any of the IDDs.

The NRC staff agrees with the licensee's description of the expected containment response to small-break LOCAs. The overall containment response predicted with the GOTHIC containment model, including items (1) through (4) above, was consistent with the expectations for this limited range of break sizes. Therefore, the NRC staff concludes that there is reasonable assurance that the results of the GOTHIC studies can be used to support these amendments.

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[2] Described in Duke Power Company LLC (then Duke Energy Corporation), McGuire Nuclear Station, Catawba Nuclear Station, "Mass and Energy Release and Containment Response Methodology," DPC-NE-3004-PA, Revision 1, December 2000.

The containment pressure response, the differential pressure seen by the IDDs and vent curtains, and the pressure drop in the fan flow path were used by the licensee to demonstrate that the ARS fan will operate in a stable region.

The staff concludes that, with the addition of the changes proposed in the license amendment request, the current licensing basis remains bounded.

3.2 GOTHIC Small-break LOCA Results

The licensee evaluated a spectrum of different break sizes. The results from these analyses, were as follows:

(1) For break sizes above approximately 0.005 ft^2 (1-inch diameter break), the resulting differential pressure across the IDDs was in excess of that required to open the doors. This created a flow path for air to pass through the ice condenser and into the ice condenser upper plenum, and then to pass through the top deck door blankets into the upper containment. At the time the air return fan would be manually started, there was sufficient flow area to prevent the fan motors from experiencing a high differential pressure across the divider deck. The divider deck differential pressure remained below the design limit.

(2) For break sizes below approximately 0.0025 ft^2 (½-inch diameter break), the differential pressure across the IDDs was not sufficient to open them. However, for breaks in this range, and smaller, the 1 psig in containment was not reached and manual action to start an ARS fan would never be initiated.

(3) For break sizes between 0.005 ft^2 and 0.0025 ft^2, it is possible that the differential pressure across the IDDs may not be high enough to open any of the doors, or would only be enough to cause one or more of the IDDs to open and possibly re-close intermittently. This would not provide a continual, open flow area for air to pass all the way through the ice condenser. However, the vent curtain flow paths (discussed above) are present, and by design these flow paths allow for the movement of air around the IDDs during momentary periods of pressure imbalance. For break sizes in this range, the air being moved by manual operation of an air return fan would pass through these vent curtain flow paths (in addition to the existing, smaller leakage area across the divider deck) and return to upper containment. The GOTHIC analyses showed that with a constant air return fan flow and with the fan manually started at the earliest expected point in the transient, the resulting divider deck differential pressure remains below that which would cause the air return fans to be in a region of unstable operation. The calculated differential pressure from the limiting GOTHIC cases was below the shut-off head for the air return fans, and below the point of unstable operation for the air return fans.

(4) In response to the staff's request, the licensee also identified the break size which would result in a containment pressure increase to 3 psig in less than 10 minutes. The expected break size to reach the containment hi-hi pressure setpoint of 3 psig within 10 minutes, was found to be about 0.01 ft^2 (1.35-inches diameter break). This was consistent with previous small-break LOCA scoping studies performed by the licensee

using the GOTHIC code, which have shown that breaks in this size range should reach the 3 psig setpoint in about 7 minutes, assuming no cooling from the lower containment ventilation units. If some lower containment cooling was assumed, the break size required to reach the containment hi-hi pressure setpoint within 10 minutes would be slightly larger.

Sensitivity calculations to assess the impact of changes to the containment initial conditions (which included pressure, temperature, and relative humidity), RCS depressurization rates, lower containment ventilation cooling capacities (including a complete loss of containment ventilation), and lower ice condenser inlet door behavior were performed by the licensee. It was determined that none of these factors resulted in a substantial impact on the calculated divider deck differential pressures.

Sensitivity calculations to assess the impact of variations in the vent curtain resistance on the divider deck differential pressure were also performed by the licensee. These sensitivities determined that the analysis conclusions were not altered by a reasonable variation in the flow path resistance.

The potential for ARS fan operation in an unstable region of the performance curve, as shown in the UFSAR, was evaluated by the licensee. Unstable operation of the air return fan could result from a lower and upper containment differential pressure condition created by the lack of an adequate air and steam flow path through the ice condenser IDDs and top deck curtain. Under these conditions, the air return fans would be operating with flow and static pressure surges or pulsations and increased noise and vibration. Brake horsepower would initially decrease then increase as the fan total pressure increases to the shut-off point of the performance curve. The brake horsepower at the shut-off point of the fan performance curve is less than the nominal horsepower rating for the fan motor. However, the results of the licensee's containment studies demonstrated that following a small-break LOCA in which one ARS fan was started at 1 psig, the fan would continue to operate within the stable regions of the fan's performance curve. The analyses showed that the open flow area through the ice condenser following a small-break LOCA would allow air to flow into the upper containment, thus preventing development of a lower and upper containment differential pressure condition greater than 0.5 psid and unstable air return fan operation. The air return fan would operate in a shut-off region of the fan curve (no flow) with the lower containment pressure 0.5 psig higher than the upper containment pressure. The air return fan shut-off head, at 0.075 lbm/ft^3, is approximately 0.249 psig.

4.0 SUMMARY

The NRC staff finds the licensee's evaluation of small-break LOCAs using the modified GOTHIC 4.0/DUKE model acceptable for evaluating the containment response to these breaks in support of the proposed operator action to manually start an ARS fan. The manual operation of an ARS fan will not change the current licensing basis for the containment response to DBAs and will continue to meet the requirements in GDCs 16, 38 and 50. The NRC staff finds there is reasonable assurance that a flow path from the lower to the upper containment will be established for breaks which pressurize the containment to 1 psig. The NRC staff finds there is reasonable assurance that the pressure between the upper and lower containment will remain

below the isolation damper actuator and the ARS fan design limit of 0.5 psid and the ARS fan will operate in a stable region.

The NRC staff, therefore, finds acceptable the licensee's proposal to modify the Catawba 1 and 2 licensing bases, as it is described in the UFSAR and changes to the emergency operating procedures, to acknowledge the operator actions described above.

5.0 STATE CONSULTATION

In accordance with the Commission's regulations, the South Carolina State official was notified of the proposed issuance of the amendments. The State official had no comments.

6.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to the installation or use of facility components located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendments involve no significant increase in the amounts and no significant change in the types of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (70 FR 61657). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

7.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

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