



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION II
SAM NUNN ATLANTA FEDERAL CENTER
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ATLANTA, GEORGIA 30303-8931

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March 31, 2006

EA-06-070

Duke Energy Corporation (DEC)
ATTN: Mr. B. Hamilton
Site Vice President
Oconee Nuclear Station
7800 Rochester Highway
Seneca, SC 29672

SUBJECT: OCONEE NUCLEAR STATION - NRC INSPECTION REPORT NOS.
05000269/2006012, 05000270/2006012, AND 05000287/2006012;
PRELIMINARY GREATER THAN GREEN FINDING

Dear Mr. Hamilton:

This letter and the enclosed supporting documentation discuss a finding that appears to have greater than very low safety significance. Initially identified as unresolved item (URI) 05000269,270,287/2005004-07 in Section 4OA2.4 of NRC Integrated Inspection Report No. 05000269,270,287/2005004, issued on October 28, 2005, this finding concerns the apparent untimely corrective actions in resolving east penetration room blowout panel-related deficiencies for all three Oconee Units.

Specifically, in the late 1980's or early 1990's the upper and lower east penetration room blowout panels were improperly modified (i.e., epoxied and fastened in place). The modification caused the pressure relief point of the panels to be considerably greater than the 63 pounds per square foot licensing basis, and resulted in the flood mitigation panels (lower) not being assured of opening to prevent auxiliary building flooding. This was identified as non-cited violation 05000269,270,287/2002004-02 in Section 4OA5 of NRC Integrated Inspection Report No. 05000269,270,287/2002004, issued on October 28, 2002. During a subsequent presentation to the NRC in 2004, DEC indicated that modifications were necessary to prevent flooding of the auxiliary building because the east penetration room doors and block walls would likely fail during a high energy line break (HELB) and the blowout panels were not assured of opening. The proposed modifications included installation of flood impoundment features to contain the break flow, and installation of new blowout panels/flood outlet devices. However, as discussed under unresolved item (URI) 05000269,270,287/2005004-07, DEC had not developed any modifications or a schedule as of September 2005 for bringing the three units

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back into compliance with the licensing basis. Consequently, as a result of the inappropriate panel modifications, in conjunction with the inappropriate addition of floor curbing and the inadequate strength of internal doors and block walls (all identified in 2001 Problem Investigation Process report (PIP) O-01-00815), Units 1, 2, and 3 continue to be operated outside their licensing basis with respect to HELB-related flood mitigation in the auxiliary building. Therefore, it has been concluded that adequate corrective actions have not been taken to promptly resolve the aforementioned HELB-related concerns with the east penetration room blowout panels for all three Oconee Units.

This finding was assessed based on the best available information, including influential assumptions, using the applicable Significance Determination Process (SDP) and was preliminarily determined to be a Greater Than Green Finding. Enclosed is a summary of the SDP Phase 3 analysis. The finding has a potentially greater than very low safety significance because, instead of directing potential HELB-related flood water out properly operating blowout panels, the existing condition would allow flood waters to egress down into the auxiliary building and significantly impact the high pressure injection (HPI) pumps.

Although feedwater line break frequency was quantitatively determined, the NRC staff conducted a qualitative evaluation of the risk based on the assumed HELB-related flooding loss of HPI and the potential unavailability of emergency feedwater (EFW) due to HELB-related effects (e.g., flooding, impingement, steam environment, etc.). As such, the evaluation considered the numerous ways EFW availability/recovery could be impacted, and concluded that a one in ten chance of failure of EFW would result in a Greater Than Green finding.

The finding is also an apparent violation (AV) of 10 CFR Part 50, Appendix B, Criteria XVI, Corrective Action, for failure to promptly identify and correct this significant condition adverse to quality. Specifically, as a result of inappropriate east penetration room blowout panel modifications (identified as a violation in 2002), in conjunction with the inappropriate addition of floor curbing and the inadequate strength of internal doors and block walls (all identified in DEC's corrective action program in 2001), Units 1, 2, and 3 continue to be operated outside their licensing basis with respect to HELB-related flood mitigation in the auxiliary building. This apparent violation (identified as AV 05000269,270,287/2006012-01: Failure to Promptly Correct Long-Standing East Penetration Room Blowout Panel-Related Deficiencies That Preclude Flood Mitigation in the Auxiliary Building) is being considered for escalated enforcement action in accordance with the NRC Enforcement Policy). Accordingly, for administrative purposes, URI 05000269,270,287/2005004-07 is considered closed.

In addition to the apparent violation discussed above, a related apparent violation of 10 CFR 50.73, Part (v) was identified for the failure to report that east penetration room blowout panel-related deficiencies would prevent the fulfillment of the HPI system safety function to mitigate the consequences of a HELB (i.e., to shutdown the reactor and maintain it in a cold shutdown condition). This issue was initially identified as URI 05000269,270,287/2005004-08 in Section 40A2.5 of NRC Integrated Inspection Report No. 05000269,270,287/2005004. A failure to

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report could impact the NRC's ability for oversight of licensed activities. As such, its significance was not evaluated through the SDP, but rather was evaluated in accordance with the guidance in Section IV.A.3 of the NRC Enforcement Policy. Because its safety significance is low and the particular regulatory process was not significantly impeded, this apparent violation (identified as AV 05000269,270,287/2006012-02: Failure to Report East Penetration Room Blowout Panel-Related Deficiencies Would Prevent Fulfillment of the HPI System Safety Function) is currently not being considered for escalated enforcement. Accordingly, for administrative purposes, URI 05000269,270,287/2005004-08 is considered closed. The current Enforcement Policy is included on the Nuclear Regulatory Commission's website at <http://www.nrc.gov/reading-rm/adams.html>.

In accordance with Inspection Manual Chapter (IMC) 0609, we intend to complete our evaluation using the best available information and issue our final determination of safety significance within 90 days of this letter. The significance determination process encourages an open dialog between the staff and the licensee; however, the dialogue should not impact the timeliness of the staff's final determination. Before we make a final decision on this matter, we are providing you an opportunity to: (1) present to the NRC your perspectives on the facts and assumptions, used by the NRC to arrive at the finding and its significance, at a Regulatory Conference or (2) submit your position on the finding to the NRC in writing. If you request a Regulatory Conference, it should be held within 30 days of the receipt of this letter and we encourage you to submit supporting documentation at least 1 week prior to the conference in an effort to make the conference more efficient and effective. If a Regulatory Conference is held, it will be open for public observation. The NRC will also issue a press release to announce the conference. If you decide to submit only a written response, such a submittal should be sent to the NRC within 30 days of the receipt of this letter.

Please contact Mr. D. Charles Payne at (404) 562-4540 within 10 business days of the date of your receipt of this letter to notify the NRC of your intentions. If we have not heard from you within 10 days, we will continue with our significance determination and enforcement decisions and you will be advised by separate correspondence of the results of our deliberations on this matter.

Since the NRC has not made a final determination in this matter, a Notice of Violation is not being issued at this time. In addition, please be advised that the number and characterization of the apparent violations may change as a result of further NRC review.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and your response (if any) will be available electronically for public inspection in the

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Sincerely,

/RA/

Charles Casto, Director
Division of Reactor Projects

Docket Nos.: 50-269, 50-270, 50-287
License Nos.: DPR-38, DPR-47, DPR-55

Enclosure:
SDP Phase 3 Summary (**OFFICIAL USE ONLY -
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