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May 3, 2007

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

Mr. Jim Dyer, Director Office of Nuclear Reactor Regulation U.S. Nuclear Regulatory Commission Mail Stop O-5 E7 Washington, DC 20555

Subject:

Duke Power Company LLC d/b/a Duke Energy Carolinas, LLC

Oconee Nuclear Station, Units 1, 2, and 3

Docket Numbers 50-269, 50-270, and 50-287; REQUEST FOR NRC TO REVIEW APPEAL OF FINAL SIGNIFICANCE DETERMINATION FOR

SSF FLOOD BARRIER WHITE FINDING

Reference:

NRC Letter from William D. Travers to B. H. Hamilton, dated March 1,

 $2007; RESPONSE\ TO\ APPEAL\ OF\ FINAL\ SIGNIFICANCE$

DETERMINATION FOR A WHITE FINDING AND NOTICE OF VIOLATION (OCONEE NUCLEAR STATION - NRC INSPECTION

REPORT NOS. 05000269/2007007, 05000270/2007007, and

05000287/2007007)

With this letter, Duke Power Company LLC d/b/a Duke Energy Carolinas, LLC (Duke) respectfully requests that the Nuclear Regulatory Commission (NRC) reconsider the Final Significance Determination (FSD) associated with the Standby Shutdown Facility (SSF) Flood Barrier. By incorporating the Jocassee Dam fragility analysis results into an objective reassessment of the Significance Determination Process, Duke contends that the resultant finding should be appropriately categorized as Green.

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On November 22, 2006, Duke received a FSD and notice of violation¹ regarding failure to adequately control the flood barrier surrounding the SSF at the Oconee Nuclear Station (ONS). Duke appealed the White Finding and violation in a letter dated December 20, 2006².

During the time period of July 2006, through December 2006, a fragility study associated with the Jocassee Dam was being completed by ARES Corporation at the request of Duke. The NRC was made aware on June 20, 2006³, that Duke had initiated this comprehensive study. During the course of the study, Duke provided the NRC with status updates as to when its completion was expected. Duke formally provided the results of this study to the NRC on February 5, 2007⁴. On March 1, 2007, Duke received a letter from the NRC stating that the appeal of the White Finding had been denied⁵. It appears that although the fragility study was relevant to the finding, the NRC's process prohibited the staff from considering it because it had not been docketed at the time the finding was issued.

Duke understands that the Reactor Oversight Process (ROP) limits the introduction of new information that was not previously docketed pursuant to the Appeal Process set out in Attachment 2 of Inspection Manual 0609.02. However, Duke believes that reconsideration of the FSD is warranted.

Duke has observed that implementation of the ROP has undergone significant changes in the recent past. In response to direction from the Commission, the NRC staff has attempted to issue findings more expeditiously, although that sometimes means going forward with findings on the basis of more qualitative than quantitative information. This has resulted in a shorter timeframe for licensees to provide the NRC with information relevant to such findings. While Duke appreciates the increased focus on timeliness, there is some concern that the appeal process has not also been changed in order to allow licensees to provide additional information that may not have been available during the time period before a finding was issued. Duke believes that such a change is necessary to prevent the NRC from

05000287/2007007)

¹ NRC Letter from William D. Travers to B. H. Hamilton, dated November 22, 2006; FINAL SIGNIFICANCE DETERMINATION FOR A WHITE FINDING AND NOTICE OF VIOLATION (OCONEE NUCLEAR STATION - NRC INSPECTION REPORT NOS. 05000269/200617, 05000270/200617, and 05000287/200617)

² NRC Letter from B. H. Hamilton to NRC, dated December 20, 2006; APPEAL OF THE FINAL SIGNIFICANCE DETERMINATION FOR A WHITE FINDING AND REPLY TO A NOTICE OF VIOLATION: EA-06-199

³ Oconee NRC Senior Resident Inspector Mel Shannon was notified by Oconee Regulatory Compliance during the biweekly Regulatory Review Meeting on June 20, 2006.

⁴ Duke Letter from Bruce Hamilton to NRC dated February 5, 2007, TRANSMITTAL OF SEISMIC FRAGILITY STUDY ⁵ NRC Letter from William D. Travers to B. H. Hamilton, dated March 1, 2007; RESPONSE TO APPEAL OF FINAL SIGNIFICANCE DETERMINATION FOR A WHITE FINDING AND NOTICE OF VIOLATION (OCONEE NUCLEAR STATION - NRC INSPECTION REPORT NOS. 05000269/2007007, 05000270/2007007, and

constantly trying to balance timeliness against the need for accuracy, consistency, and predictability in the SDP process.

The NRC stated in its denial of Duke's appeal of the significance determination that it used a blended (qualitative and quantitative) approach to risk determination. This approach acknowledged the large uncertainty in risk values associated with a seismic failure of the Jocassee Dam. The dam failure fragility analysis submitted by Duke in February 2007, documents important evidence regarding the robustness of the Jocassee Dam. Specifically, the analysis demonstrates that the Jocassee seismic capacity is significantly higher than assumed in the earlier Oconee IPEEE and NSAC/60 studies. This is not unexpected since these earlier studies were intentionally bounding and conservative. When the updated dam fragility information is combined with the seismic hazard curve (seismic event frequency) the risk contribution of dam failures from seismic events becomes negligible.

The comparison of the results (below) demonstrates the significant effect that the seismic fragility has on the overall risk significance of the performance deficiency.

All Initiating Events	Previous Values	Updated Values
Seismic Failure	5E-07	negligible
PMP Initiating Failure	negligible	negligible
Random Dam Failure	7E-07	7E-07
Change	1.2E-06	7E-07

Using the same approach as in the NRC's Phase 3 risk analysis, the updated risk impact is estimated to be 7E-07.⁶ This value, which represents a more accurate, quantitative assessment, would result in a risk significance of Green in the ROP.

In light of the information provided by the Jocassee Dam fragility study, and in keeping with the goals of the ROP to provide results which are objective, understandable, repeatable, and predictable, Duke respectfully requests that the NRC re-review the FSD associated with this issue. Duke acknowledges that the ROP currently does not permit the introduction of new, un-docketed information during the appeal process. However, Duke believes that the appeal process should be changed to allow consideration of such information, given the significant staff focus on improving timeliness for issuance of findings. Additionally, Duke believes that even under the current process, the receipt of information, which significantly

⁶ Note that the updated seismic fragility analysis has no impact on the estimated random failure or Probable Maximum Precipitation (PMP) event failure probability. The random failure probability represents the risk contribution from dam failures caused by internal structural failure mechanisms. The failure mechanisms found in historical data for similar dams include internal "piping" failure, subsidence, and slope failure. With the consideration of both external (seismic/PMP) and internal failure mechanisms, Duke believes that this risk assessment is comprehensive and of sufficient quality to confidently conclude that the performance deficiency is of very low safety significance.

impacts the ROP determination, is a unique event which warrants further consideration. Acknowledging that this request is unusual in nature, Duke is willing to meet with the NRC, if desired, to further discuss this issue.

In closing, aside from the risk attributes that determine the significance of each finding, extensive site resources are required to perform the causal analysis needed to address a White Finding. For this specific issue, Duke has carefully considered the factors leading to the removal of the cover plate and has taken corrective actions to prevent recurrence. Overall, Duke fully understands the importance of the SSF and believes that this issue has been adequately addressed. As such, conduct of a supplemental inspection is not expected to shed further light on this matter, and will result in an unnecessary expenditure of resources on the part of both NRC and Duke. These resources could have a more positive impact if they were focused on more risk-significant issues. Clearly, the NRC's final ruling on inclusion of the Jocassee Dam fragility study will be a critical factor in reaching a final resolution.

There are no commitments contained in this letter.

Thank you very much for your consideration of this request. If you have any questions or require additional information, please contact Robert C. Meixell of the Oconee Regulatory Compliance Group, at (864) 885-3279.

Very truly yours,

Bruce H. Hamilton Site Vice President

Oconee Nuclear Station

cc: Mr. D. W. Rich
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