

November 30, 2005

MEMORANDUM TO: A. Randolph Blough, DRS:RI  
Victor M. McCree, DRS:RII  
Cynthia D. Pederson, DRS:RIII  
Dwight D. Chamberlain, DRS:RIV  
Eric J. Leeds, DPR:NSIR  
Catherine Haney, DORL:NRR

FROM: Farouk Eltawila, Director, DSARE:RES */RA/*

SUBJECT: FINAL REPORT, "IMPACT OF THE 2004 ATLANTIC HURRICANE SEASON ON U.S. NUCLEAR POWER PLANTS"

Attached for your information is a copy of the final report entitled "Impact of the 2004 Atlantic Hurricane Season on U.S. Nuclear Power Plants" prepared by Office of Nuclear Regulatory Research, Division of Systems Analysis and Regulatory Effectiveness, Advanced Reactors and Regulatory Effectiveness Branch.

RES conducts long term studies of selected topics, as part of the OpE program. The main purposes of this study are to (1) collect and document information on Atlantic hurricanes, in general, and their specific impact on U.S. power plants in 2004, (2) and to share this information internally and with stakeholders.

The author found that, in general, hurricane preparations by the NRC and its licensees were effective. Although the hurricanes disrupted operation of the impacted nuclear power plants (NPPs), they did not have a significant impact on nuclear safety. NPPs are robust facilities, which are designed to withstand the impact of severe weather such as hurricanes. The reportable impacts on the NPPs were mainly confined to three areas; loss of offsite power (LOOP), loss of sirens, and loss of communications equipment. Of these, LOOP is the most risk significant, although loss of sirens or communications equipment could hinder emergency response to an event.

The site preparations and hurricane impacts, including the affected equipment, contributing causes, and licensees' corrective actions, may all provide useful insights for other plant sites in preparing for future hurricanes or other severe weather conditions.

CONTACT: John V. Kauffman ([jvk@nrc.gov](mailto:jvk@nrc.gov)), RES:DSARE:ARREB  
(301)-415-6830

Enclosure:

1. Final Report Impact of the 2004 Atlantic Hurricane Season on U.S. Nuclear Power Plants

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