February 2, 2005

Mr. David J. Modeen Vice President and Chief Nuclear Officer Electric Power Research Institute 1300 West W.T. Harris Blvd. Charlotte, NC 28262

Dear Mr. Modeen:

On behalf of the Office of Nuclear Regulatory Research (RES), I have signed the attached addendum to the memorandum of understanding (MOU) between the U.S. Nuclear Regulatory Commission (NRC) and the Electric Power Research Institute (EPRI). The NRC and EPRI initially established the MOU, dated November 25, 1997, to allow and encourage cooperative nuclear safety research. The enclosed addendum focuses that research on vessel head penetration inspection, crack growth, and repair. Specifically, the addendum describes a collaborative effort to address issues related to nickel-base alloy cracking and vessel steel degradation attributable to corrosion in solutions or mixtures of boric acid.

While the NRC and EPRI have both conducted ongoing research, testing, and data evaluation in these areas for many years, our mutual agreement on the content of this addendum will improve and expedite communication on the status of our respective programs. From that starting point, both organizations will be better able to manage their research programs. In addition, as always, the NRC and EPRI will cooperate in conducting tests and producing data, but each will independently analyze the data and draw conclusions.

My staff has informed me that collaborative activities are proceeding well. On January 18, 2005, NRC and industry representatives met at Argonne National Laboratory to discuss results of boric acid corrosion testing performed separately under NRC and industry funding. My staff has also been discussing tentative plans with industry representations for meetings in May 2005 on (a) the destructive examinations of control rod drive mechanism nozzles removed from the discarded North Anna Unit 1 head, and (b) nickel-base alloy stress-corrosion crack growth rate testing. Both industry and the NRC are funding programs on these two topics. I am also aware that EPRI has informed the relevant NRC staff of an upcoming conference on nickel-base alloy primary-water stress-corrosion cracking (PWSCC) on March 7–10, 2005. As you may recall, the NRC hosted the previous conference in this series, and I expect that several representatives of the RES staff will attend the upcoming conference. I am encouraged by this level of collaboration between the industry and the NRC, and hope that it will continue. Thank you for your continued support of our collaborative research on nickel-base alloy cracking and other topics of mutual concern.

Sincerely,

/RA/ J. Craig for

Carl J. Paperiello, Director Office of Nuclear Regulatory Research

Enclosure: As stated

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