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Mr. James M. Taylor
Executive Director for Operations
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Taylor:

SUBJECT: PROPOSED RESOLUTION OF GENERIC ISSUE 130, "ESSENTIAL SERVICE WATER SYSTEM FAILURES AT MULTI-UNIT SITES" AND TASK ACTION PLAN FOR GENERIC ISSUE 153, "LOSS OF ESSENTIAL SERVICE WATER IN LWRs"

During the 376th meeting of the Advisory Committee on Reactor Safeguards, August 8-9, 1991, we discussed your May 9, 1991 response to our report to you dated April 18, 1991, on the proposed resolution of GI-130. During this discussion, we also had the benefit of the documents referenced.

Since licensees will be examining their essential service water systems (ESWS) in detail as an important part of their IPE efforts, we agree with your decision to make the analysis used by the staff in its proposed resolution of GI-130 available to licensees. This information should assist them in carrying out their IPEs. We do not, however, understand your statement that "... using the IPE as our vehicle to resolve this generic issue is not a practical option." It seems to us that, if these licensees do a conscientious job of performing their IPEs and identify and correct vulnerabilities involving their ESWS, resolution of the GI-130 issue can be accomplished on a plant-specific basis within a reasonable time.

We believe that the analysis of GI-130 was extremely conservative with respect to the methodology used to establish 1) the frequency of loss of ESWS and 2) the accident mitigation attributes of the "representative plant" for these plants. This was recognized by your contractor, Brookhaven National Laboratory, on page vi of the Executive Summary of NUREG/CR-5526, where the statement is made that "... the service water-related CDF ... is considered to be essentially upper bound."

The ACRS has historically recommended that PRAs be performed on a best-estimate basis and that conservatism then be added when needed to deal with uncertainty for regulatory purposes. (We most recently discussed this issue in our report of July 19, 1991, to Chairman Selin on the subject of "The Consistent Use of Probabilistic Risk Assessment.") It is clear to us that this principle was not applied to the staff's proposed resolution of GI-130 and is not generally applied by the staff to the cost benefit analysis used for generic issue resolution.

Further, we note that RES has recently developed a Task Action Plan (TAP) for Generic Issue 153, "Loss of Essential Service Water in

LWRs." This work represents an expansion of GI-130 to the remaining 99 operating LWRs. The TAP states that the IPEs for the population of operating plants "... may provide information related to the ESW system" and "... may also result in an ESW risk model for each plant, which may be useful for this task." We fail to see how a meaningful IPE can be performed without a detailed evaluation of a plant's ESWS and the accident sequences that could result from partial or complete loss of ESWS.

We believe that GI-153 is well enough defined that it could be resolved on a plant-specific basis as part of the IPE process, and we recommend that this approach be followed. We believe also that there may be other generic issues at a similar stage of development and suggest that work on their resolution could be deferred until enough IPEs have been received and evaluated to determine if the expenditure of staff resources to deal with them as generic issues is warranted. We would like to be kept informed on this matter.

Sincerely,

David A. Ward
Chairman

References:

1. Memorandum dated May 9, 1991, from James M. Taylor, Executive Director for Operations, to David A. Ward, Chairman, Advisory Committee on Reactor Safeguards, Subject: Proposed Resolution of Generic Issue 130, "Essential Service Water System Failures at Multi-Unit Sites"

2. Memorandum dated July 8, 1991, from Warren Minners, Office of Nuclear Regulatory Research, to Eric Beckjord, Office of Nuclear Regulatory Research, Subject: Task Action Plan (TAP) for Generic Issue 153, "Loss of Essential Service Water in LWRs"