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Regulatory File Cy

May 28, 1975

Mr. D. L. Ziemann, Chief
Operating Reactors - Branch 2
Division of Reactor Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Dresden Station Units 2 and 3
Quad-Cities Station Units 1 and 2
Dresden Station Special Report No. 39,
Quad-Cities Special Report No. 14,
Analysis of Hydrogen Generation and
Control in Primary Containment Following
Postulated Loss of Coolant Accident,
NRC Dkts. 50-237, 50-249 50-254, and 50-265.

Dear Mr. Ziemann:

As discussed with members of your staff and in a letter to Edson Case dated March 18, 1975 concerning this subject, we will stop work on the containment atmosphere dilution (CAD) system and will commence work on the air containment atmosphere dilution (ACAD) systems. Due to delays in finalizing the CAD system design, the schedule for completing either the CAD or ACAD system modifications at all four Dresden and Quad-Cities Stations units will be July 1, 1977.

The installation of a compressed air system (ACAD) will depend on approval of the subject reports. We have contacted General Electric Company and requested they recalculate the metal-water reaction number per 10 CFR 50.46. In the General Electric ECCS Evaluation Model Report NEDO-20566, there are two alternative methods to calculate the metal-water reaction number which were accepted by the NRC staff. It is our understanding that the metal-water reaction number provided to us for the Dresden 2/3 and Quad-Cities 1/2 plants is based on the more conservative calculation described in NEDP-11030-77. We are confident that the percent metal-water reaction calculated using the alternate method in NEDO-20566 will support the conclusion of the subject reports. Since the percent metal-water reaction is the primary basis for de-inerting the containments, this confirming analysis will be sufficient to justify NRC approval. General Electric has committed to have this calculation by November 1, 1975.

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On the premise that the metal-water reaction calculation will justify de-inerting, we are proceeding with the ACAD system. An ACAD system design report will be submitted for NRC approval by August 1, 1975. If the ACAD system is not approved and we are required to install a nitrogen system (CAD), the resulting delay between the two systems is one for one. For example, if the ACAD system was disapproved January 1, 1976, a delay of approximately six months would be incurred on completion of a CAD system or completion of the four units on January 1, 1978.

In order to provide a suitable post accident combustible gas control system by the earliest practicable date, we are proceeding with the ACAD system. The risk associated with proceeding with ACAD is minimal in view of the likelihood of NRC approval and the significantly lower cost of the ACAD system versus the CAD system.

One (1) signed original and 39 copies of this additional information concerning the subject are provided for your use.

Very truly yours,

J. S. Abel
Nuclear Licensing Administrator
Boiling Water Reactors