

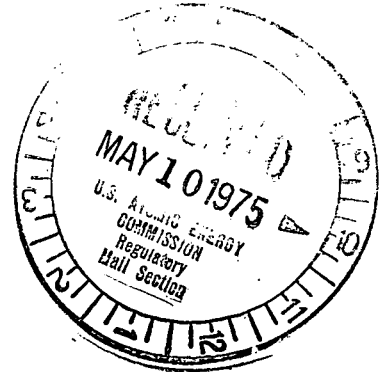
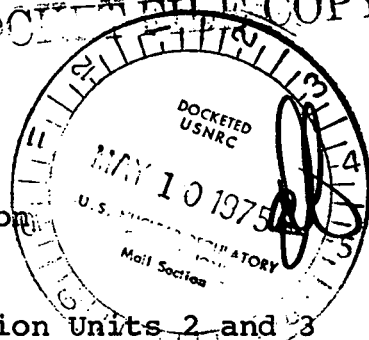


**Commonwealth Edison**  
 One First National Plaza, Chicago, Illinois  
 Address Reply to: Post Office Box 767  
 Chicago, Illinois 60690

May 7, 1975

REGULATORY DOCUMENT FILE COPY

Mr. Dennis 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  
 Additional Containment Design Information  
NRC Dkts. 50-237, 50-249, 50-254, and 50-265

Dear Mr. Ziemann:

Your letter of April 17, 1975 outlined recent developments associated with Mark III pressure suppression testing being conducted by General Electric and indicated that certain suppression pool hydrodynamic loads that occur during a LOCA should be evaluated relative to the Dresden/Quad-Cities Mark I containments and submitted to you. You also suggested that this response should parallel related efforts on relief valve vent clearing and steam quenching vibration phenomena. (1)

At an April 23/24, 1975 meeting with G.E. and other utilities owning Mark I containment plants, Commonwealth Edison was appraised of the phenomena identified in your letter of April 17, 1975 and the work that G.E. has performed to date relative to potential structural implications resulting from these phenomena. G.E. presented a summary of the work they have performed indicating that the conclusions are applicable to the Dresden/Quad-Cities Mark I containments.

It was further indicated at the April 23/24 meeting that design parameters will not be exceeded in the torus or ECCS suction header due to forces resulting from the opening of safety/relief valves. Operating experience plus previous analytical work that has been performed (2) does not suggest any operational safety problems with this containment.

(1) Letter (NRC) to Commonwealth Edison dated February 15, 1975

(2) TVA Report of Safety/Relief Valve Testing and G.E. Quad-Cities Report NEDO-10859

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An evaluation of the Dresden/Quad-Cities containment configuration details will be made and documented together with a plant evaluation similar to that performed by G.E. and discussed with the NRC in a meeting in Bethesda on April 10, 1975. This evaluation will be submitted by August 4, 1975 to document for our plants the conclusion that the integrity and safety performance of the containment are maintained under normal transient and accident conditions. This evaluation will address the phenomenological concern which has been identified; i.e., the effect of pool swell on the drywell-to-torus vent system. This will include large size plan and section drawings of the suppression chamber which illustrate the structures, equipment and piping in the suppression pool which could be subjected to hydrodynamic loads.

Your letter identified several other specific items of information that will require an expansion of the above evaluation. We propose to respond to these questions by the tentative program outlined below.

	<u>Date</u>
1. Document S/R Valve Vent Clearing Model	2nd/Quarter 1975
2. Impact Tests for Torus Internal Structure Shapes	2nd/Quarter 1975
3. Qualify Impact Model	3rd/Quarter 1975
4. Calculate Mark I Pool Swell Impact Loads for the Reference Plant	3rd/Quarter 1975
5. Calculate Other Significant Mark I LOCA Dynamic Loads	4th/Quarter 1975
6. Complete Currently Planned Mark I Pool Swell Tests	4th/Quarter 1975
7. Perform Stress Analysis Tests of Torus, Torus Internals and Supports	3rd/Quarter 1976
8. Confirm Calculated Loads	1st/Quarter 1976
9. Determined Need for Plant Torus Stress for S/R Valve Discharge	3rd/Quarter 1975
10. Combine Stresses and Compare to Plant Licensing Bases	4th/Quarter 1976

In accordance with your February 15, 1975 Safety/Relief Valve letter requesting a program identification, we plan to submit within 60 days of the date of this letter the details of the above tentative program which will be designed to consider both the S/R valve and LOCA conditions for a time history of potential loads including asymmetric loads and a justification of these loads. This submittal will respond to both your February 15, 1975 letter and

Mr. D. L. Ziemann

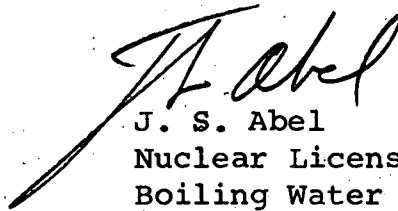
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your recent April 17, 1975 letter.

Subsequent to the planned submittal, 60 days from the date of the letter, we will meet with you as part of the BWR owners group that has been formed to address this common problem.

Very truly yours,

A handwritten signature in cursive script, appearing to read "J. S. Abel". The signature is written in dark ink and is positioned above the typed name and title.

J. S. Abel

Nuclear Licensing Administrator  
Boiling Water Reactors