



**GPU Nuclear Corporation**

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Writer's Direct Dial Number:

August 14, 1985

Mr. John A. Zwolinski, Chief  
Operating Reactors Branch No. 5  
Division of Licensing  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Dear Mr. Zwolinski:

Subject: Oyster Creek Nuclear Generating Station  
Docket No. 50-219  
Mark I Containment Torus-to-Drywell  
Vacuum Breakers

Reference: (1) NRC letter dated April 11, 1985 from J. A. Zwolinski  
(NRC) to P. B. Fiedler (GPUN)  
(2) NRC letter dated December 24, 1984 from D. B. Vasallo  
(NRC) to H. C. Pfefferlen (GE)

In accordance with Reference 1, this letter provides the status of analysis of the Oyster Creek Torus-to-Drywell vacuum breaker valves for the limiting load combination, which includes the chugging slamming transient defined in the latest General Electric Mark I Program load definition and all other concurrent Mark I Program loads. The wetwell-to-drywell differential pressure load and vacuum breaker response analysis had incorporated the wetwell-to-drywell vacuum breaker load methodology approved by the NRC (Reference 2).

The GPUN analysis has provided preliminary results indicating that the following vacuum breaker valve parts could become overstressed:

- . Counterweight Arms
- . Disk Arm
- . Disk Arm Keys
- . Valve Shaft
- . Counterweight Hubs
- . Counterweight Hub Keys

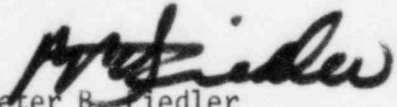
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GPUN is currently considering a one-for-one replacement of valve parts (with different material properties) as a means to achieve acceptable stresses. However, discussions with Continuum Dynamics, Inc. have indicated that there may be excess conservatism in the Reference 2 analysis which, if eliminated, could result in acceptable stress levels for the identified valve parts. GPUN intends to pursue the performance of a modified analysis with CDI. The additional analysis is anticipated to require approximately 8 weeks. The results of this analysis will be forwarded to your attention as soon as they become available.

In light of the late NRC approval of the load methodology to be used in analyzing the plant specific vacuum breaker loads and the fact that we are still evaluating the need for any valve modifications, GPUN requests deferment of any modification work on these valves until at least the Cycle 12 refueling outage (12R).

Very truly yours,

  
Peter B. Fiedler  
Vice President and Director  
Oyster Creek

PBF/dam  
Enclosures

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NRC Resident Inspector  
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