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Writer's Direct Dial Number:

54-219

June 8, 1984

Director  
Division of Engineering and Quality Assurance  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Dear Sir:

Subject: Oyster Creek Nuclear Generating Station  
IE Bulletin No. 81-03  
Request for Additional Information

On December 23, 1982, GPU Nuclear (GPUN) received your letter dated December 20, 1982, requesting additional information concerning our initial response to IE Bulletin No. 81-03 Flow Blockage of Cooling Water to Safety Components by Corbicula sp. (Asiatic Clam) and Mytilus sp. (Mussel) dated May 29, 1981.

Subsequently, GPUN initiated appropriate action to adequately respond to your request. On August 25, 1983, GPUN submitted a response to item 4a and advised that items 2 and 5e would be addressed in future correspondence. The following are the "Actions to be taken by Licensees" as described in the bulletin and GPUN's responses to the aforementioned items. The numbering method is consistent with that used in the bulletin and your December 20, 1982 letter:

2. If it is unknown whether either of these species is present in the local environment or is confirmed that either is present, determine whether fire protection or safety-related systems that directly circulate water from the station source or receiving water body are fouled by clams or mussels or debris consisting of their shells. An acceptable method of confirming the absence of organisms or shell debris consists of opening and visually examining a representative sample of components in potentially affected safety systems and a sample of locations in potentially affected fire protection systems. The sample shall have included a distribution of components with supply and return piping of various diameters which exists in the potentially affected systems. This inspection shall have been conducted since the last clam or mussel spawning season or within the nine month period preceding the date of this bulletin. If the

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absence of organisms or shell debris has been confirmed by such an inspection or another method which the licensee shall describe in the response (subject to NRC evaluation and acceptance), no further action is necessary except for items 4 and 5 of actions applicable to holders of an operating license.

Response

As requested, additional inspections were conducted of the following components: Emergency Service Water (ESW) Pump internals, ESW piping downstream of the ESW pumps, and ESW piping upstream of the Containment Spray Heat Exchangers (CSHE). In all areas examined there was no significant blockage detected to cause flow reduction. The maximum biofouling layer observed was approximately 2 to 3 centimeters thick. Additionally, there were no blue mussels (Mytilus edulis) observed in any of the areas inspected. In an effort to better monitor the condition of the CSHE, pressure gauges have been installed on the Containment Spray Heat Exchanger pass partition plates for the tubeside flow passes. The gauges provide differential pressure between two passes and also overall pressure drop in the CSHE tubeside. Also, flow measurements are taken which will provide an indication of increases in biofouling.

5.e. Provide results and conclusions of chlorination feasibility study as they become available.

Response

As stated in our August 25, 1983 letter, an evaluation of the Containment Spray Heat Exchanger biofouling was conducted. This resulted in a recommendation for consideration for providing an oxidant injection point immediately before the Containment Spray Heat Exchanger. Upon further consideration of that recommendation and evaluation of the existing chlorination system it was determined that the existing system, with the installation of a new service water booster pump to improve the flow of chlorinated water, is expected to meet the requirement for controlling biofouling in the Containment Spray Heat Exchanger.

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This concludes our response to your December 20, 1982 letter, and if you have any further questions or require additional information please do not hesitate to contact Mr. Douglas Moore of our Licensing and Regulatory Affairs Department at (609)971-4630.

Very truly yours,



Peter B. Fiedler  
Vice President and Director  
Oyster Creek

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cc: Dr. Thomas E. Murley, Administrator  
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NRC Resident Inspector  
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