

## United States Senate

WASHINGTON, DC 20510-3001

January 25, 1995

Mr. James Taylor  
Executive Director For Operations  
Nuclear Regulatory Commission  
11555 Rockville Pike  
Rockville, Maryland 20852

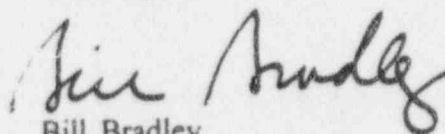
Dear Mr. Taylor:

On October 7, 1994, I sent a letter to the Nuclear Regulatory Commission (NRC) requesting the inspection and safety status of the reactor components at the Oyster Creek Nuclear Generating Station.

The NRC's December 16, 1994 reply has generated the enclosed letter, from the Nuclear Information and Resource Service, to which I would appreciate a response.

Thank you in advance for your help. I look forward to hearing from you.

Sincerely,



Bill Bradley  
United States Senator

BB/sr



## Nuclear Information and Resource Service

1424 16th Street NW, Suite 601, Washington, DC 20036 202-328-0002; fax: 202-462-2183; e-mail: nirsnet@aol.com

January 6, 1995

The Honorable Bill Bradley  
United States Senate  
Washington, DC 20510

Dear Senator Bradley:

The Nuclear Information and Resource Service (NIRS) would like to thank you for your letters of October 7, 21, and November 3, 1994 to the United States Nuclear Regulatory Commission (NRC) forwarding concerns of your constituents regarding the Oyster Creek Nuclear Generating Station restart. We respectfully request your continued attention to this emerging issue.

NIRS and the New Jersey citizen group, Oyster Creek Nuclear Watch (OCNW), have been closely monitoring activities at the nuclear power station. Our efforts to further monitor General Public Utilities Nuclear's inspection of the Oyster Creek nuclear power station during its most recent refueling outage have revealed that new cracking of the top guide--a safety-related reactor internal component. This is in addition to the much publicized cracking of the core shroud discovered during this outage.

It is our concern that Mr. James Taylor, NRC Executive Director for Operations, did not report this finding nor the results of additional safety-related component inspections to your office in his responses dated December 15 and 16, 1994. Additionally, Mr. Taylor did not inform your office that despite a recent General Electric service alert, at least one safety-related reactor internal, the core plate, was deliberately not inspected because the licensee claimed that the component was inaccessible for inspection. Additional safety-related reactor internals inspections specified in a citizen petition before the NRC were not indicated by Mr. Taylor to have been performed by the licensee during the recent outage.

NIRS would like to take this opportunity to address these issues raised by Mr. Taylor's response.

As you may already be aware, NIRS and OCNW petitioned the NRC on September 19, 1994 under 10 CFR 2.206 for the suspension of the Oyster Creek operating license until

1) the completion of enhanced inspections for age-related deterioration of all safety-related reactor internals and 2) the completion of a safety analysis and evaluation of identified General Electric Boiling Water Reactor (BWR) design deficiencies on the irradiated fuel storage pool. On October 27, 1994, NRC denied our request to suspend the license until the requested actions had been completed. We have appealed the NRC denial and raised additional contentions regarding the inoperable and combustible Thermo-Lag fire barriers installed at Oyster Creek. The manufacturer of Thermo-Lag is under a seven count federal indictment.

Central to the petition, we requested the NRC to require enhanced inspections of all safety-class reactor internals subject to operation-related stress corrosion cracking as identified in the NRC document "Boiling Water Reactor Internal Aging Degradation Study" (NUREG/CR-5754) published September, 1993 and in viewgraphs presented to the NRC by the Boiling Water Reactor Owners Group during a June 28, 1994 meeting in Rockville, Maryland entitled "Core Shroud and Vessel Internals Concerns."

The petition filed by NIRS and OCNW focuses on safety concerns in that Oyster Creek is the oldest GE Mark I BWR operating in the United States and the core shroud, a safety-related reactor component, is subject to age-related deterioration, embrittlement and cracking, as discovered in younger reactors of the same model. The petition points out that the Boiling Water Reactor Owners Group in its presentation to the NRC on June 28, 1994, stated that "Shroud cracking is a signal to reevaluate, in more detail, the potential for cracking in other vessel internals." As you are aware, subsequent licensee inspections conducted during the recent refueling outage discovered that Oyster Creek's core shroud is cracked along at least one circumferential weld. It should be noted that while the licensee has installed tie-rod modifications to bind the cracked weld together, Swedish and German utilities, also experiencing cracking of BWR internals, have opted for the more expensive replacement of cracked core shrouds. However, it remains the petitioners contention that discovery of the cracking of the core shroud mandates an enhanced inspection of all safety class reactor internals.

Upon learning of extensive cracking of top guide and core plate reactor internals in an overseas BWR and in that these safety-related components at Oyster Creek were cited in the NIRS/OCNW petition, NIRS began a direct inquiry to the NRC and the licensee as to the status of inspections of those respective parts at Oyster Creek. The NIRS inquiry to the NRC identified that Oyster Creek's top guide component, whose safety-related function is to maintain proper spacing of fuel rod assemblies at the top of the reactor core, has been structurally cracked since at least 1991 and that new cracks were identified as a result of the Fall, 1994 inspection. While Oyster Creek had notified the NRC through an inspection report dated August 9, 1991, NRC officials told both NIRS and the trade publication *Inside NRC* that they were only recently made aware of the structural cracking.

We are concerned that Mr. Taylor is remiss in his report to your office on the status of reactor internal components vital to the safe operation of Oyster Creek:

1) NRC failed to identify to your office that structural cracking of the top guide had been documented by NRC since August 9, 1991, while NRC officials responsible for the materials

analysis and evaluation of Oyster Creek reactor internals claimed to only recently have been aware of the deteriorating part after the Oyster Creek reactor vessel was closed up and sealed to prepare for restart.

2) NRC failed to identify to your office that new cracking of at least one safety-class component, the top guide, was discovered as a result of the last refueling outage inspection.

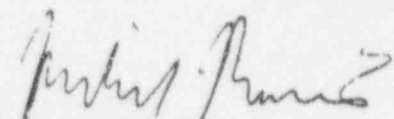
3) NRC failed to inform your office that at least one safety-related reactor internal, the core plate, was deliberately passed over for inspection by the licensee, claiming that the reactor internal was inaccessible to inspection. The core plate provides guidance to control rod guide tubes and lateral support to the reactor core. General Electric in a service alert (RICSIL-071) dated November 19, 1994, notified Oyster Creek and other BWR operators that both the core plate and top guide are vulnerable to cracking as witnessed at the Wuergassen nuclear power plant in Germany.

4) NRC has failed to take reasonable action to require an analysis and evaluation of the synergistic effect of multiple reactor internal component cracking on the safe operation of Oyster Creek before allowing the reactor to operate under continued deteriorating conditions for an additional two years.

We believe that the NRC's response to your office and constituents was, at best, misleading regarding the conditions of the Oyster Creek reactor. Further investigation by your office into the NRC's response is warranted. In addition, we seek your support for a suspension of Oyster Creek's operating license until a full inspection of safety-related reactor core internals is carried out and any necessary modifications completed.

Please feel free to call upon our office if we can be of further assistance.

Sincerely,



Michael Mariotte  
Executive Director



Paul Gunter, Director  
Reactor Watchdog Project

CC

Ms. Helen Richmond, Berkley Township Environmental Commission  
Ms. Janet Oliver deCamp  
Office of the Inspector General, NRC