Dr. and Mrs. Gerald R. Mazetis
Post Office Box 685
Heathsville, Virginia 22473
(804) 580-5529 FAX (804) 580-5529

January 6, 2000

Alexander W. Dromerick, Sr. Project Manager
Project Directorate 1
Division of Licensing Project Management, NRR
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Dear Mr. Dromerick;

Thank you for your December 27, 1999 response to my letter to Chairman Jackson pertaining to the increasing public risk of more frequent experimental aircraft testing in the environs of the Calvert Cliffs Nuclear Power Station (CCNPS). You have made it clear that the NRC also feels that public concerns regarding the military activities in the Patuxent River Complex are appropriate and of common interest.

All rhetoric aside, it comes down to the scrutability of the licensee's conclusion that the probability of an onsite crash is one in a million. The NRC and the Navy should now perform an independent critical assessment of this estimate. The Navy welcomes the opportunity to meet with the NRC to discuss this issue[1]. The Navy is the sole repository of the most credible crash database for the Maryland, Virginia, Delaware tri-state area for the past 55 years. As such, these data should be used to either confirm or modify the licensee's assumptions. A similar database was referenced in my letter to Chairman Jackson. This database is for the 55-year history of the 5200 square mile Nellis Air Force Range (1-3 crashes per year).

Such historical data must be carefully applied. For instance, let's extrapolate the aforementioned Nellis data to the Virginia, Maryland, Delaware tri-state area. We can simply say that, given the same 10-30 crashes over the next ten years in our tri-state area, the likelihood that any of these crashes would impact CCNPS is one-in-a-million. The rationale for such a conclusion is now directly related to the credit given to the administrative restrictions imposed on military pilots, little of which apply when a pilot ejects from a malfunctioning jet that is out of control. Other considerations include violations of these restrictions that occur by pilots with some frequency, inadvertent or otherwise. The large uncertainty inherent in such assumptions should be carefully weighed against the potential consequences should the assumptions be too optimistic.

This brings up a final point. Reference 1 cites the licensee's design basis for the primary containment to withstand the impact of a fully fueled Boeing 707. However, that same Boeing 707 (or military aircraft) could crash into the spent nuclear fuel pool building instead of the primary containment. The spent fuel pool is not designed to withstand a Boeing 707 impact and typically contains more than one reactor core off-load of nuclear fuel. This nuclear fuel retains large amounts of residual radioactivity

DOCKET NOS. 50-317 & 50-318 DF03 1/0 Add: Rich Barrett-1 AL Dromerick-1

PDR ADOCK 05000317

and contains the potential for a large source of radioactive contamination if dispersed to the surrounding environment.

An aircraft crash into this spent fuel pool building would produce an inferno from the aviation fuel that would be immense and overwhelming. The resulting radioactive contamination from shattered/disintegrated nuclear fuel fragments would render the fuel pool building inaccessible to firefighters. The fire and smoke plume would continue to disperse clouds of radioactive contaminants into the atmosphere. The consequences of a fire-dispersed nuclear fuel pool content to the surrounding tri-state area would create land/water contamination and increasing latent cancer fatalities for many years. In addition, it would be naïve for us to believe that the swath of destruction from such an onsite aircraft crash could not have an impact on the ability of the nuclear reactor to shut down and to remain shut down.

Because of this potential, and because of the large current uncertainties, the NRC should recommend that the Navy not increase their flight operations until a more comprehensive independent risk assessment is completed.

The above opinion is offered solely in the best interests of residents of the Virginia, Maryland, Delaware tri-state area.

A reply to this letter is unnecessary.

Respectfully,

Dr. Gerald R. Mazetis

Enclosure: Video of Patuxent River Flight Operations

[1] Letter to Ms. Shirley Ann Jackson, Chairman, USNRC from Timothy S. Smith, Executive Director, Naval Air Station dated March 1999.