

September 14, 2007

Mr. Clinton Bastin, Chemical Engineer
U.S. Department of Energy (Retired)
987 Viscount Court
Avondale Estates, GA 30002

SUBJECT: INSIGHT ABOUT PAST AND PROPOSED TECHNIQUES IN REPROCESSING

Dear Mr. Bastin:

On behalf of the U.S. Nuclear Regulatory Commission (NRC), I am responding to your letter, dated July 4, 2007, to Chairman Klein and Commissioner Lyons. Thank you for sharing your thoughts on the importance of good regulation and providing insight into the proposed processes that could be used in the reprocessing of spent fuel from nuclear power plants. Your letter touched upon the need for understanding the complexities of advanced reprocessing, and also discussed past commercial reprocessing plant designs and performance issues. You have also urged the NRC to consider the lessons learned from these past designs and experiences when developing regulations for such facilities.

As you may know, as described in the Energy Reorganization Act of 1974, the role of the NRC does not include promoting the development of any technology. Therefore, we will not comment on the feasibility of the reprocessing technology that is proposed in the development of the Global Nuclear Energy Partnership (GNEP). If this technology is commercialized and a license application submitted, our primary focus would be the regulation of the safety and security of the proposed facility.

In response to this need, the U.S. Department of Energy (DOE) and NRC expanded cooperation for GNEP through a Memorandum of Understanding (MOU). This MOU establishes the foundation for cooperation between DOE and NRC on technological research and engineering studies for GNEP. Through this MOU, DOE will share the latest information on advanced recycling technologies with the NRC, allowing us to develop licensing criteria for GNEP facilities. This will permit the NRC to identify potential health, safety, and safeguards issues to be considered.

If you would like additional information on the NRC's work with GNEP, you may refer to our public website at www.nrc.gov or the Agency-wide Documents Access and Management System for the recent NRC staff report to the Commission (SECY-07-0081) and the Commission's response. The address is www.nrc.gov/reading-rm/adams/web-based.html.

We appreciate your interest in the advanced spent nuclear fuel facility safety and in the regulatory process. Should you have any additional questions, or if I can be of any further assistance in this matter, please contact Yawar Faraz at 301-492-3207.

Sincerely,

/RA/

Margie Kotzalas, Chief
MOX Branch Special Projects and
Technical Support Directorate
Division of Fuel Cycle Safety
and Safeguards
Office of Nuclear material Safety
and Safeguards

C. Bastin

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