ENERGY*SOLUTIONS*

CD06-0454

December 4, 2006

Mr. Scott C. Flanders, Director
Environmental and Performance Assessment Directorate
Division of Waste Management and Environmental Protection
Mail Stop T7-J8
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Re: Energy*Solutions*, LLC letter- NRC Order Exempting Energy*Solutions* from Licensing Requirements of 10 CFR 70 (CD06-0382), dated September 29, 2006

Dear Mr. Flanders:

As discussed in our meeting and presentation on October 24, 2006, I have enclosed supporting documentation from the Bechtel Jacobs Company, for the above referenced project. The following table lists the references and purpose of each document.

Document	Purpose
NCSE-ET-K25-1632, *Demolition of K-306*, October 2006.	Identifies the controls and limits necessary to demonstrate criticality is incredible in K-306. Once the completion of certain prerequisite controls and limits is obtained, Nuclear Criticality Safety (NCS) will document that conditions have been established and criticality is incredible. After that, demolishment of 306 can begin.
NCSR-ET-K25-0021, Rev. 2, *Nuclear Criticality Safety Review of Foams for D&D*, September 2004.	Identifies generic Nuclear Criticality Safety controls that will be required for application of foam to K-25 and K-27 gaseous diffusion equipment and piping. Documents results from a nuclear criticality safety analysis of various foam materials. Foaming of the process gas equipment and piping will fix any residual uranium deposits and preclude water entry.
ANL-06/32, *Study on Degradation of a Commercial Rigid Polyurethane Foam Used for Filling of Process Gas Equipment (PGE) and Pipes and Corrosion Behavior of Pipes at K-25/K-27*, August 2006.	Describes and presents the results of evaluating the long-term performance of the urethane foam in the landfill environment.

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Document	Purpose
NCSR-ET-K25-0051, *CAAS Deactivation Criteria for K-25/K-27 D&D*, April 2006.	Describes generic criteria proposed for establishing that criticality is incredible during decontamination and decommissioning (D&D) of the K-25/K-27 cascade buildings. Incredibility means that the expected frequency for criticality is determined to be below 10^{-6} per year, so that a Criticality Accident Alarm System (CAAS) is not required by DOE Order, ANSI/ANS Standard, and BJC procedure.
BJC-NS-1005, Rev. 5, *Nuclear Criticality Safety Evaluations and Calculations*, July 2006.	Specifies requirements for performing Nuclear Criticality Safety (NCS) Evaluations (NCSE) and NCS Determinations (NCSD) for fissile material operations.

These documents are for Official Use Only and must be maintained in accordance with applicable requirements.

Please call me at (801) 649-2114 with any questions or concerns.

Sincerely,

Tye Rogers
Senior Vice President of Regulatory Affairs

Cc: Mr. James Park, NRC / without attachments
Mr. Dane L. Finerfrock, Director, Utah Division of Radiation Control / without attachments