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February 5, 2009

Dr. Patricia Dehmer
Acting Director
Office of Science, SC-1
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585

Mr. Thomas P. D'Agostino
Under Secretary for Nuclear Security
National Nuclear Security Administration, NA-1
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585

Dear Dr. Dehmer, Mr. D'Agostino:

With this letter, the Fusion Energy Science Advisory Committee transmits the panel report on High Energy Density Laboratory Plasmas (HEDLP) prepared in response to your charge of March 6, 2008. We thank Prof. Betti and the HEDLP panel for their effort.

As requested, the panel has identified the compelling research opportunities in fundamental HEDLP science and identified the scientific issues of implosion physics and target design that need to be addressed to make the case for inertial fusion energy. Furthermore, the panel provided essential information for an effective stewardship of the Joint HEDLP Program and background for a scientific plan for energy-related HEDLP studies.

FESAC voted unanimously to endorse this comprehensive report. We believe it provides a useful platform for the stewardship of the Joint HEDLP Program and a detailed plan for the development of the inertial fusion energy science program.

Sincerely,

A handwritten signature in blue ink that reads "Martin Greenwald".

Martin Greenwald
Chair, Fusion Energy Science Advisory Committee

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