Department of Energy
Idaho Operations Office
1955 Fremont Avenue
Idaho Falls, ID 83415

October 30, 2006

The Honorable James E. Risch
Governor of Idaho
P.O. Box 83720
Boise, Idaho 83720

SUBJECT: Request to Receive Limited Commercial Spent Nuclear Fuel Shipments for Examination at the Idaho National Laboratory (OM-06-014)

Dear Governor Risch:

The U.S. Department of Energy's Idaho National Laboratory (INL) has completed the first phase of post-irradiation examinations on four commercial spent nuclear fuel rods and two control rod tubes from the North Anna, Virginia nuclear power plant. These exams were performed in support of the Department's goals to develop world-class laboratory expertise and capabilities in Idaho, and to support the nuclear industry's efforts to develop superior fuel designs, resulting in higher energy output and less spent fuel to disposition.

The Department appreciates the State of Idaho's support in achieving these goals. Due to the success of the North Anna exams, the INL has been approached to perform one or two additional examinations of commercial nuclear fuels. The purpose of this letter is to request your consent under Section J.1 of the 1995 Settlement Agreement, to allow INL receipt of the commercial spent nuclear fuel that would be the subject of these proposed additional examinations.

The exams on the North Anna fuel were conducted for the Electric Power Research Institute (EPRI) and AREVA, a private company that fabricates nuclear fuels for commercial reactors, for the purpose of contributing to the nuclear industry's efforts to develop superior fuel designs. The INL's portion of the exams has been very successful and shipment of the spent nuclear fuel and control rod tubes to BWXT in Virginia for the next phase of examinations occurred on July 30, 2006, well ahead of the December 31, 2006, approval condition set out in the state's September 14, 2004 letter.

The INL's performance on the North Anna fuel exams has demonstrated that the Laboratory has the specialized facilities and expertise to scientifically examine spent nuclear fuel. Accordingly, the EPRI has informed the INL of some additional fuel exams that are being planned for early calendar year 2007 and has requested that the INL consider performing the examinations. The specific fuel rods and requested examinations have yet to be identified. However, they are anticipated to be either intact fuel rods, such as the North Anna rods, or possibly some rods with

some cladding failure. In either case, the total amount of material to be received and examined is expected to be between 4 and 10 fuel rods, with less than 20 kilograms of uranium (as compared to 4 fuel rods, 2 control rod tubes and 7 kilograms of uranium for North Anna). The examinations to be performed are also expected to be similar to those performed on the North Anna fuel, but all major parts of the exams would be performed in Idaho at INL.

The fuel rods would be transported to the INL's Materials and Fuels Complex (MFC) in a Department of Transportation compliant shipping cask. MFC would receive and unload the shipping cask, perform examinations on the fuel rods, section the fuel rods, and perform mechanical and destructive examinations. Remaining sections of the rods would be archived at MFC for recurring examinations until ultimate disposition in the repository. We also propose to count these shipments towards the annual shipment limits and metric tonnage limits found in paragraphs D.2.f and D.2.c (respectively) of the 1995 Settlement Agreement.

As with the North Anna work, we recognize that the proposed projects involve the shipment of commercial spent nuclear fuel into Idaho, which may raise questions pertaining to the 1995 Settlement Agreement. It is our sincere desire to anticipate and avoid any confusion or conflict, and to continue to do our work within the spirit and intent of the Agreement. We also wish to work with Idaho to ensure that Idahoans receive understandable, timely, and accurate information about the laboratory's activities in a manner that fosters confidence in our activities and State oversight of those activities.

Mr. Ray Furstenau, of the Idaho Operations Office, will contact your staff to arrange for a meeting to discuss these potential additional fuel examinations. If you have any questions regarding this request, please feel free to contact me.

Sincerely,

Elizabeth D. Sellers
Manager