

STATEMENT OF CONSIDERATIONS

**PETITION BY WESTINGHOUSE ELECTRIC COMPANY FOR AN
ADVANCE WAIVER OF DOMESTIC AND FOREIGN PATENT RIGHTS
UNDER DOE COOPERATIVE AGREEMENT NO. DE-NE0000566;
W(A)2013-031; CH-1700**

The Petitioner, Westinghouse Electric Company LLC, has requested a waiver of domestic and foreign patent rights for all subject inventions arising from its participation under the above referenced Cooperative Agreement and lower-tier subcontracts entered thereunder. The Cooperative Agreement is entitled "Development of Light Water Reactor Fuels with Enhanced Accident Tolerance." This waiver will not impact the rights of those parties subject to Public Law 96-517, as amended, nor shall it grant any rights in inventions made by employees of the National Laboratories. Please see attached waiver petition from Petitioner.

The goal of the Cooperative Agreement is to introduce a lead test rod (LTR) for an accident tolerant fuel (ATF) into a commercial reactor within 10 years. The objective of the first 2-year phase of this work is to identify, build, and begin testing technically feasible options for high-temperature-resistant cladding and high density, high thermal conductivity fuel. The objective of the next 2-year phase of work is to complete the preliminary testing and narrow down the feasible options. The objective of the third phase of work is to provide the test reactor testing required to verify the performance of the feasible choices.

Currently, the total anticipated cost of the Cooperative Agreement is \$4.5 million, with the Petitioner providing \$1.2 million, for about 26% cost sharing. This waiver is contingent upon the Petitioner maintaining, in aggregate, the above cost sharing percentage over the course of the agreement.

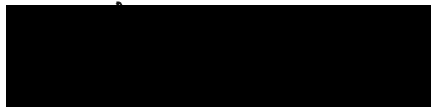
As noted in its waiver petition, Petitioner has been actively pursuing advanced fuel technologies (coatings for Zr alloys, SiC composite cladding, waterproofed UN fuel and U₃Si₂ fuel) since 2004. Petitioner states that its investment in the technology has been in excess of \$5M over this time period. Petitioner further states that it has developed two versions of SiC cladding and one version of two coatings (Ti₂AlC and amorphous steel). Considering Petitioner's technical expertise and significant investment in this technology including sizable cost sharing in this Cooperative Agreement, it is reasonable to conclude that Petitioner will continue to develop and ultimately commercialize the technology and products which may arise from this project.

Petitioner has agreed that this waiver shall be subject to the march-in and preference for U.S. industry provisions, as well as the U.S. Government license, comparable to those set out in 35 U.S.C. 202-204. Further, Petitioner has agreed to the U.S. competitiveness provisions as attached to this Statement as paragraph (t). In brief,

Petitioner has agreed that products embodying intellectual property developed under this Agreement shall be substantially manufactured in the United States, and that Petitioner will not license, assign or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements.

Referring to item 10 of the waiver petition, granting this waiver is not anticipated to have any adverse impact on competition. Currently, the work is at a very early stage of development where the technical and commercial path forward is far from clear. Most of the work performed under this agreement will be to generate multiple paths forward which can then be tested to identify claddings and fuels for manufacture and use. Petitioner believes that the grant of the patent waiver is necessary to remain competitive in the field, and, in view of the global competition to create accident tolerant fuel for the commercial market, the waiver is not expected to place the Petitioner in a preferred or dominant position.

Considering the foregoing, it is believed that granting this waiver will provide Petitioner with the necessary incentive to invest its resources in the commercialization of the results of the Cooperative Agreement in a fashion which will make the above technology available to the public in the shortest practicable time. Therefore, upon evaluation of the waiver petition and in view of the objectives and considerations set forth in 10 CFR 784, all of which have been considered, it is recommended that the requested waiver be granted.

A black rectangular box redacting the signature of Daniel D. Park.

Daniel D. Park
Assistant Chief Counsel
Intellectual Property Law Division
Chicago Office

Date: 12/11/13

Based upon the foregoing Statement of Considerations and representations in the attached waiver petition, it is determined that the interests of the United States and the general public will best be served by a waiver of patent rights of the scope described above, and therefore the waiver is granted. This waiver shall not apply to any modification or extension of the cooperative agreement, where through such modification or extension, the purpose, scope or cost of the cooperative agreement has been substantially altered.

CONCURRENCE

Frank Goldner

TECHNICAL DIRECTOR

FUEL CYCLE R&D

ADVANCED FUELS DEVELOPMENT

NE-52

Date: 2/24/2014

APPROVAL

John P. Lucas

Assistant General Counsel for

Technology Transfer and

Intellectual Property

GC-62

Date: 2/27/2014

(t) U. S. Competitiveness

The Contractor agrees that any products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States unless the Contractor can show to the satisfaction of the DOE that it is not commercially feasible to do so. In the event the DOE agrees to foreign manufacture, there will be a requirement that the Government's support of the technology be recognized in some appropriate manner, e.g., recoupment of the Government's investment, etc. The Contractor agrees that it will not license, assign or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements. Should the Contractor or other such entity receiving rights in the invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license, or other transfer of rights in the waived invention is suspended until approved in writing by the DOE.