

STATEMENT OF CONSIDERATIONS

REQUEST FOR ADVANCE WAIVER OF PATENT RIGHTS BY WESTINGHOUSE ELECTRIC COMPANY, LLC, UNDER DOE AWARD NO. DE-NE0008824; W(A)-2019-003, CH-1810

Petitioner, the Westinghouse Electric Company, LLC (Westinghouse), requested a waiver of domestic and foreign patent rights on behalf of itself, sub-recipients, and subcontractors for all subject inventions arising under the above referenced award. The award is entitled "DEVELOPMENT OF LWR 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.

The objective of Petitioner's award is to continue the development of light water reactor fuels with enhanced accident tolerance. This work is a continuation of previous work completed under DE-NE0008222 and DE-NE0000566. The research aim is to enable deployment of U_3Si_2 and doped UO_2 in Cr coated zirconium alloy claddings in the Byron Unit 2 lead test rods, deploy SiC and Cr coated rods with oxidation resistant U_3Si_2 and doped UO_2 fuels in lead test assemblies by 2022, and develop risk mitigation strategies for researched materials. The accident tolerant fuel program goals are to provide benefits for the customer utilities from fuel cost savings and from the reduction or elimination of some currently required safety requirements/systems.

The total cost of the award is \$93,615,949.00 of which the Government is to contribute \$74,829,759.00 in addition to Petitioner's contribution of \$18,723,190.00, or about twenty percent (20%). This waiver is contingent upon Petitioner maintaining, in aggregate, the above cost sharing over the course of the award. The period of performance is anticipated to be from January 01, 2019 to January 31, 2021.


As noted in its waiver petition, Petitioner has been researching accident tolerant fuels for the past fifteen years. Petitioner produces more than fifty percent of the nuclear fuel manufactured in the U.S. as well as more than fifty percent of the zirconium cladding. Petitioner has invested more than \$12M towards design, testing, and manufacturing of fuels and claddings in the last fifteen years. From 2019 to 2028, Petitioner anticipates designing, manufacturing, and testing fuel rods in a commercial reactor, and licensing such accident tolerant fuels. Petitioner anticipates shipment of commercial quantities of such fuel beginning in 2023.

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. In brief, Petitioner has agreed that products embodying a waived invention or produced through the use of a waived invention 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.


As set out in the attached waiver petition, Petitioner has requested rights in the subject inventions of its employees and its lower-tier subcontractors not subject to Public Law 96-517. It is believed that this approach will facilitate timely commercialization of the technology by furthering the establishment of business and technical relationships between the parties and providing a mechanism for obtaining meaningful cost sharing between the parties. This waiver contemplates that the parties will allocate title or other rights to inventions among themselves as they deem appropriate during the course of their association consistent with the terms of this waiver. Accordingly, title may be waived directly to a lower-tier subcontractor upon mutual agreement of the Petitioner and the subcontractor. However, this waiver will only apply to such lower-tier subcontractor(s) who provide a letter to DOE acknowledging their right to ask for a waiver and agreeing to the terms of this waiver. There is no intention that this waiver should impact the rights of those parties subject to Public Law 96-517, and any subcontracts with such parties must include appropriate Bayh-Dole patent clauses.

Referring to item 10 of the waiver petition, granting this waiver is not expected to have an adverse impact on competition. Petitioner cites to the early stage of development in the technology where commercial success is uncertain. Both domestic and foreign based competitors are already present in the market and investing in the technology to create alternative accident tolerant fuels. Thus, granting this Petition is not expected to hinder competition in the field.

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 award in a fashion which will make the 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.


Jacob A. Heafner
Patent Attorney
Intellectual Property Law Division
DOE SC

Date: 1/17/20


Daniel D. Park
Assistant Chief Counsel
Intellectual Property Law Division
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Date: 1/17/20

Based upon the foregoing Statement of Considerations and representations in the attached waiver petition, it is determined that the interests of the U.S. 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 will not apply to any modification or extension of the award, where through such modification or extension, the purpose, scope or cost of the award has been substantially altered.

CONCURRENCE:

APPROVAL:

Andrew Griffith
Deputy Assistant Secretary for Nuclear
Fuel Cycle and Supply Chain NE-4

8/25/2021
Date: _____

Brian J. Lally
Assistant General Counsel for Technology
Transfer and Intellectual Property
GC-62

9.21.21

Date:

WAIVER ACTION - ABSTRACT

W(A)-2019-003

REQUESTOR

Westinghouse
Electric
Company,
LLC.

CONTRACT SCOPE

Develop light water reactor fuels with
enhanced accident tolerance.

RATIONALE FOR
DECISION

Petitioner has significant
experience in researching
accident tolerant fuels.
Petitioner has invested more
than \$12M towards the
technology and anticipates
shipment of commercial
quantities beginning in 2023.

(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 an appropriate, legally binding manner. 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(s): (1) undergo a change in ownership amounting to a controlling interest, or (2) sell, assign, or otherwise transfer title or exclusive rights in the invention (s), then the waiver, assignment, license, or other transfer of rights in the waived invention(s) is/are suspended until approved in writing by the DOE. Approval of any modification of this provision, shall require the concurrence of the Assistant Secretary for Nuclear Energy, the Acting Assistant Secretary, or the cognizant Principal Deputy Assistant Secretary.