#### STATEMENT OF CONSIDERATIONS

### REQUEST FOR ADVANCE WAIVER OF PATENT RIGHTS BY GENERAL ELECTRIC COMPANY, UNDER DOE AWARD NO. DE-NE0008221; W(A)-2015-04, CH-1720

The Petitioner, the General Electric Company (GE), has requested a waiver of domestic and foreign patent rights 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 the Petitioner's award is the development of light water reactor fuels with enhanced accident tolerance. The research aim is the development of cladding applications with resistance to accident conditions in nuclear power plants. The work to be performed under the present award is a continuation of previous work completed under DE-NE0000568.

The total anticipated cost of the award is \$3,284,864.00 including the Petitioner's contribution of \$656,973.00, or about twenty percent (20%) of the total cost of the work under the award. This waiver is contingent upon the Petitioner maintaining, in aggregate, the above cost sharing percentage over the course of the award.

As noted in its waiver petition, the Petitioner has extensive experience in the design of complex commercial energy systems including nuclear light water reactors such as the boiling water reactor. Further, the Petitioner is a supplier of fuel products and services for commercial power reactors. The Petitioner has invested over \$5 million to upgrade their alloy design laboratories and to perform environmental degradation and cracking susceptibility testing. Additionally, the Petitioner notes they are positioned to provide research for the manufacture of commercial nuclear reactors and fuel bundles. Considering the Petitioner's technical expertise and significant investment in this technology including cost sharing in this award, it is reasonable to conclude that the Petitioner will continue to develop and ultimately commercialize the technology and products which may arise from this award.

The 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, the Petitioner has agreed to the U.S. competitiveness provisions as attached to this Statement. In brief, the 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 the 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 expected to have an adverse impact on competition. The Petitioner cites to a competitive market with multiple parties working to improve this technology. Additionally, there are several competing approaches to improving the safety of nuclear power generation facilities. Granting the Petition will not hinder competition in the field. Rather, the success of this award can be expected to stimulate further investment and competition in this technology.

Considering the foregoing, it is believed that granting this waiver will provide the 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.

Patent Attorney Intellectual Property Law Division Integrated Support Center

Date: 3/12/15

Daniel D. Park Assistant Chief Counsel Intellectual Property Division Integrated Support Center

Date: 3

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:

APPROV

David Henderson Director of Fuel Cycle Research and Development, NE-52

Date: 6/5/15

John T. Lucas Assistant General Counsel for Technology Transfer and Intellectual Property, GC-62

Date: 6/10/2015

# WAIVER ACTION - ABSTRACT

## W(A)-2015-04

REQUESTOR Company

CONTRACT SCOPE General Electric Develop light water reactor fuels with

enhanced accident tolerance.

## RATIONALE FOR DECISION

General Electric has experience in the design of complex commercial energy systems including nuclear light water reactors such as the boiling water reactor. Further, the Petitioner is a supplier of fuel products and services for commercial power reactors. The Petitioner will continue to invest in research programs for the development of safe fuel cladding for commercial reactors.

#### (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. <u>Contractor's agreement as set forth herein to manufacture in the U.S. will be met if the majority (i.e. at least 51%) of each product embodying any waived invention or produced through the use of any waived invention is manufactured in the U.S.</u>