STATEMENT OF CONSIDERATIONS

REQUEST FOR ADVANCE WAIVER OF PATENT RIGHTS BY BWXT NUCLEAR ENERGY, INC, UNDER DOE AWARD NO. DE-NE0008744; W(A)-2018-012, CH-1799

Petitioner, BWXT Nuclear Energy, Inc., requested a waiver of domestic and foreign patent rights for all subject inventions arising under the above referenced award. The award is entitled "ESTABLISHMENT OF AN INTEGRATED ADVANCED MANUFACTURING AND DATA SCIENCE DRIVEN PARADIGM FOR ADVANCED REACTOR SYSTEMS". Additionally, Petitioner requested the waiver extend to any subcontractors. 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 the development of integrated, advanced manufacturing and data science for advanced nuclear reactor systems. The research aim is to advance this technology by (i) developing an integrated 3-dimesional design, build, test process; (ii) demonstrating additive manufacturing capabilities in support of GEN IV reactors; (iii) developing a robust, user-friendly data science platform; and (iv) developing in-situ monitoring capabilities.

The total cost of the award is $7,915,014.28 of which the Government is to contribute $4,957,138.86 in addition to Petitioner's contribution of $2,957,875.14, or about thirty-seven percent (37%). 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 August 01, 2018 to July 31, 2020.

As noted in its waiver petition, Petitioner has extensive experience in the research and development of both small and large reactor systems. Petitioner also has experience in manufacturing these systems. Petitioner asserts that it will invest more than $4 million in additive manufacturing technology and techniques applicable to producing a nuclear reactor core utilizing additive manufacturing techniques. Petitioner also intends to utilize the additive manufacturing technology to facilitate commercialization of advanced reactors. Petitioner also asserts that granting the waiver will promote these objectives. Finally, Petitioner anticipates that its expenses and activities in this area of research will extend far beyond the term and scope of this award.

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 applies 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 a competitive market with multiple parties developing advanced reactor designs throughout the world. In addition to developments in the nuclear energy field, research and development in alternative energy sources such as renewable energy and fossil fuel powered systems continues to receive significant support. Granting this waiver is not expected to 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 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.

[redacted]

Jacob A. Heafner
Patent Attorney
Intellectual Property Law Division
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Date: 6/11/19

[redacted]

Daniel D. Park
Assistant Chief Counsel
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DOE ISC-CH

Date: 6/11/19

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:

[redacted]

Alice K. Caponiti
Deputy Assistant Secretary for Reactor Fleet
and Advanced Reactor Development
NE-5

Date: _____

APPROVAL:

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

Date: 9.13.2021

WAIVER ACTION - ABSTRACT

W(A)-2018-012

REQUESTOR	CONTRACT SCOPE	RATIONALE FOR DECISION
BWXT Nuclear Energy, Inc.	Establishment of Advanced Manufacturing and Data Science for Advance Reactor Systems.	Petitioner has significant experience in reactor design and manufacturing. Petitioner has invested significantly in additive manufacturing technology. This investment and the work to be performed under the award will facilitate commercialization of advanced 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 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.