

STATEMENT OF CONSIDERATIONS

PETITION BY BABCOCK & WILCOX mPOWER FOR AN ADVANCE
WAIVER OF DOMESTIC AND FOREIGN PATENT RIGHTS UNDER DOE
COOPERATIVE AGREEMENT NO. DE-NE0000583; W(A)2013-013; CH-
1678

The Petitioner, Babcock & Wilcox mPower, Inc., has requested a waiver of domestic and foreign patent rights for all subject inventions arising from its participation under the above referenced Cooperative Agreement entitled "MPower America: Design, License, & Certification of mPower Small Modular Reactor." 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 objective of the Cooperative Agreement is to assist in the development and deployment of the B&W mPower Small Modular Reactor (SMR) design, including (i) a Project Management Phase to perform work to develop and implement a Project Management Plan (PMP); (ii) a Design Certification Phase consisting of engineering, testing, analysis, validation, design development and licensing activities to support the design certification of the mPower SMR standard plant; (iii) a Construction Permit and Operating Licensing Phase consisting of engineering, testing, analysis, validation and design development, and licensing activities to support the 10 CFR 50 licensing process for the mPower SMR lead plant at the Tennessee Valley Authority's Clinch River site in Oak Ridge, Tennessee; and (iv) a Core Design Phase consisting of fuel design, testing and analysis efforts.

Currently, the total anticipated cost of the Cooperative Agreement is \$768 million, with the Petitioner providing \$618 million, for about 80% cost sharing. Additional DOE funds could become available for this project to increase DOE's share of the Agreement. However, this waiver is contingent upon the Petitioner maintaining at least 50% cost sharing over the course of the agreement.

As noted in its waiver petition, Petitioner has extensive and unique experience in both small and large nuclear reactor design and manufacturing and has already invested in a SMR test facility. Petitioner also states that it has filed 99 patent applications related to this project. Petitioner's parent company, Babcock & Wilcox Company, provides energy technology and services primarily in the nuclear, fossil and renewable power markets and has been a SMR technology provider and has access to a nuclear work force of over 11,000 people. Since 2008, Babcock & Wilcox Company has been recruiting power generation companies to support its SMR effort and formed the mPower SMR Industrial Consortium in 2010 to support the development of SMR design and licensing infrastructure necessary to construct the mPower SMR. To this effort, Petitioner and its teams have invested more than \$200 million since 2008, which

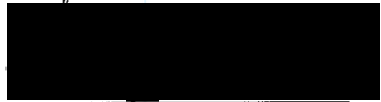
has resulted in substantial progress in design, licensing, and site characterization of the SMR project. Additionally, Petitioner states that it has made significant investments in several test facilities to support the mPower SMR development. Considering Petitioner's technical expertise and significant 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. Once Petitioner provides to DOE a U.S. Capability Showing that it has the capability and know-how to manufacture SMR reactors in the U.S., Petitioner will have the ability to manufacture outside of the U.S. for foreign sales, if it is not economically feasible to manufacture said products substantially in the U.S. or is necessary to meet localization requirements. The U.S. Capability Showing provides a benefit to the U.S. economy in that the Petitioner continues to conduct research and is expected to further invest in its nuclear-related infrastructure in the U.S. in order to meet this requirement. Making such investment in its U.S. infrastructure and R&D provides a net benefit to the U.S. economy even in cases where it becomes necessary to manufacture outside the U.S. for foreign sales. Further, based upon Petitioner's significant cost share, which could be as great as 80%, this strategy provides a commitment to investing in this technology in the U.S.

Referring to item 10 of the waiver petition, granting this waiver is not anticipated to have any adverse impact on competition. Currently, in addition to the Petitioner, there are other SMR designs being developed in the U.S. and several other foreign countries. Petitioner believes that the grant of the patent waiver is necessary to remain competitive in the field, and, in view of the global competition in this technology, the waiver will not place the Petitioner in a preferred or dominant position. The success of this Cooperative Agreement can also 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 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.



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

Date: April 8, 2013

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:



John Kelly
Deputy Assistant Secretary for
Nuclear Reactor Technologies
NE-7

Date: 4/10/13

APPROVAL:



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

Date: 4/10/13

WAIVER ACTION - ABSTRACT
W(A)2013-013

REQUESTOR

CONTRACT SCOPE OF
WORK

RATIONALE FOR DECISION

Babcock & Wilcox mPower,
Inc.

SMR development

Significant cost sharing

(t) U.S. Competitiveness

- (1) General. Except as provided below in paragraphs 3 and 4, the Contractor agrees that products embodying any waived invention or produced through the use of any waived inventions (“covered products”) will be manufactured substantially in the United States unless the Contractor can show to the reasonable satisfaction of DOE that it is not commercially feasible to do so. The Contractor further agrees to make these conditions binding on any assignee or licensee or any entity otherwise acquiring rights to any waived invention, including subsequent assignees or licensees. Should the Contractor or other such entity receiving rights in any waived invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license or other transfer of rights in any waived invention is suspended until approved in writing by DOE.
- (2) Sales in the United States. Contractor agrees that covered products that will be deployed in the United States will be manufactured substantially in the United States, unless the Contractor can show to the reasonable satisfaction of DOE that it is not commercially feasible to do so.
- (3) Manufacturing for Deployment in China. To the extent necessary to meet Chinese project localization requirements, or where commercially not feasible to substantially manufacture covered products in the U.S., such covered products can be substantially manufactured in China. Prior to commencing manufacture of covered products in China, Contractor will provide to DOE an acceptable U.S. Capability Showing (as described in paragraph 5, below) with respect to such covered products. Provided there is Contractor compliance with the U.S. Capability Showing in the preceding sentence, DOE consents to manufacture and supply of covered products within China and agrees that Contractor need not make the conditions of paragraph (1) binding on any assignee or licensee or any entity otherwise acquiring rights to any waived invention for covered products that will be manufactured and installed in mPower Plants in China.
- (4) International Manufacturing. So long as Contractor has provided an acceptable U.S. Capability Showing with respect to such covered products, and subject to other applicable U.S. laws, and to the extent necessary to meet localization requirements or where commercially not feasible to substantially manufacture covered products in the U.S., Contractor may establish and utilize manufacturing facilities located outside of the United States for deployment of such covered products in the international markets, provided that Contractor and/or its affiliates have control of the manufacturing know-how relating to such covered products.
- (5) For purposes of paragraphs 3 and 4 of this section (t), a U.S. Capability Showing with respect to a covered product shall be sufficient if Contractor provides reasonable information showing that (a) Contractor and/or its affiliates have the U.S. capability to substantially manufacture such covered products in the U.S., as and when needed for the U.S. market, and

(b) either (i) the design and engineering of such products are substantially on the basis of design and engineering performed in the U.S. (including design and engineering prior to and during the Project Period), or (ii) Contractor and/or its affiliates have the manufacturing know-how to substantially manufacture such covered products in the U.S., and thus benefit the U.S. economy.