

## STATEMENT OF CONSIDERATIONS

CLASS WAIVER OF THE GOVERNMENT'S U.S. AND FOREIGN PATENT RIGHTS IN CERTAIN IDENTIFIED INVENTIONS TO BWXT PANTEX, LLC, MADE AND TO BE MADE IN THE COURSE OF OR UNDER CONTRACT DE-AC04-00AL66620 WITH THE DEPARTMENT OF ENERGY/NATIONAL NUCLEAR SECURITY ADMINISTRATION (DOE/NNSA) FOR THE MANAGEMENT AND OPERATION OF THE PANTEX PLANT, INCLUDING A CLASS ADVANCE WAIVER OF TITLE TO INVENTIONS MADE IN THE PERFORMANCE OF COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS (CRADAS) ENTERED INTO BY BWXT PANTEX, LLC, PURSUANT TO CONTRACT DE-AC04-00AL66620 WITH DOE/NNSA. W(C)-02-003.

BWXT Pantex, LLC, (BWXT) manages and operates the Pantex Plant for the DOE/NNSA under Prime Contract No. DE-AC04-00AL66620. BWXT is organized as a large, for-profit corporation.

The Pantex Plant is a Government-owned, Contractor-operated (GOCO) production plant facility located in Amarillo, Texas, and is a part of the DOE/NNSA nuclear weapons complex. The modification of Section 91 of the Atomic Energy Act, coupled with the National Competitiveness Technology Transfer Act of 1989 (NCTTA) (P.L. 101-189), clarifies that technology transfer is a mission of DOE/NNSA consistent with the national security mission. All parts of the DOE/NNSA complex including laboratories, test sites, and production facilities participate in the DOE/NNSA technology transfer mission, consistent with statutory authority, their capabilities and program mission responsibilities.

The DOE/NNSA nuclear weapons production plants possess an abundance of technology that would be useful to the private sector to enhance U.S. Competitiveness. This technology, although developed as a part of DOE/NNSA's national security mission for the most part, has non-weapons applications that can be transferred to the private sector without any compromise of national security.

Currently, DOE/NNSA's nonprofit management and operating (M&O) contractors have the right to retain title to inventions made in the performance of their prime contract with DOE/NNSA pursuant to Title 35 U.S.C. 202 (P.L. 96-517), as amended by P.L. 98-620, other than those inventions excluded by Section 202(a)(ii-iv).

In 1983, President Reagan's Memorandum on Government Patent Policy was promulgated directing that:

To the extent permitted by law, agency policy with respect to the disposition of any invention made in the performance of a federally-funded research and development contract, grant or cooperative agreement award shall be the same or substantially the same as applied to small business firms and nonprofit organizations under Chapter 38, Title 35 of the United States Code.

DOE/NNSA has considered the impact of the President's Memorandum on its patent policy with respect to large for-profit business contractors, including its M&O contractors, and determined that Section 152 of the Atomic Energy Act of 1954 (42 U.S.C. 2182), as amended, and Section 9 of the Non-Nuclear Energy Research and Development Act of 1974 (42 U.S.C. 5908), precluded DOE/NNSA from automatically granting title to its large for-profit contractors pursuant to the President's Memorandum.

The predecessors to BWXT, like others of the Department's for-profit M&O contractors prior to 1994, had the right to file identified waiver petitions on inventions made in the performance of the Prime Contract. This process, as with the DOE/NNSA laboratories, can impose a substantial front-end administrative burden, both on DOE/NNSA and on BWXT's predecessors, in preparing and processing such individual waiver petitions.

With the overall goal of incorporating the research, development and demonstration results from BWXT's Prime Contract into the mainstream of American commerce in the most expeditious manner consistent with the President's Memorandum, as referenced in Executive Order 12591 dated April 10, 1987, and in accordance with the authority of Section 152 and Section 9, above, it is believed to be in the best interest of the United States and the general public to grant a Class Waiver to certain identified inventions made under the Prime Contract to BWXT and a Class Advance Waiver of inventions made by a Participant under a CRADA, to Participants.

Excluded from the scope of this Class Waiver are inventions which:

- (1) Fall within DOE/NNSA's weapons programs, which inventions principally relate to weapons or inherently disclose or suggest a weapons application where such disclosure or suggestion would be detrimental to national security;
- (2) Relate to the Naval Nuclear Propulsion Program;
- (3) Relate to the Uranium Enrichment (including Isotope Separation) Program;
- (4) Are classified or sensitive under Section 148 of the Atomic Energy Act of 1954, as amended;
- (5) Are included in international agreements or treaties;
- (6) Are covered by existing or future Class Waivers granted to third parties by DOE, such as "Work for Others;" or
- (7) Fall within any further exceptions that may, in the national interest, be unilaterally designated by the Secretary.

This Class Waiver does not include inventions of subcontractors under the Prime Contract.

#### Identified Invention Waiver to BWXT

In one particular, the scope of the Class Waiver is directed to and includes U.S. and foreign

patent rights to identified subject inventions made in the performance of the Prime Contract for the Pantex Plant managed by BWXT. Most of the inventions made under the Prime Contract would require additional development before they can be made available in the commercial marketplace. This is because many of the inventions made by BWXT are founded upon basic or advanced research on a very specific application to DOE/NNSA's mission. Additionally, many of these inventions are conceptual in nature and are on a laboratory or production plant proof-of-principle scale. Scale-up to a commercial size demonstration of the inventive concept is often a prerequisite to negotiating royalty-bearing licenses. Finally, many of the inventions arising out of DOE's weapons research and production will require substantial capital in order to translate the inventions into commercial reality; such costs, for example, include further engineering, design, start-up and marketing.

A Class Waiver of the Government's rights in identified inventions as set forth herein will create sufficient exclusive rights in those inventions to bring forth private venture capital to expeditiously promote and move the technology into the commercial marketplace and thereby make the benefits of DOE/NNSA's program widely available to the public in the shortest practicable time.

Additionally, under the authority of the M&O Contractor's Prime Contract, BWXT is authorized to carry out technical liaison with universities, the private sector and other Federal facilities in connection with Cooperative Agreements of the Department and CRADAs for the purpose of promoting technology transfer between the Federal laboratories and the private sector in the United States. By having a waiver of the Government's rights in subject inventions falling within the scope of this Class Waiver, BWXT will be able, where appropriate, to enhance the movement of the waived inventions to the commercial marketplace.

Furthermore, the grant of a Class Waiver of identified inventions as set forth herein will enable DOE/NNSA to take advantage of the technology transfer capabilities of BWXT. Permitting BWXT to retain title to a broad range of important inventions, except those imbued with the national interest, should further enhance the technology transfer initiatives of DOE/NNSA through BWXT's Prime Contract.

BWXT has agreed to attempt to commercialize the waived inventions within five years from the time the waiver is effective. This commitment to early commercialization by BWXT will best promote the commercial utilization of such inventions and make the benefits of the research effort conducted under the Prime Contract widely available to the public in the shortest practicable time, consistent with the objectives and considerations of DOE/NNSA's waiver regulations.

Implementation of this Class Waiver is to be by a simple procedure that requires:

- (1) BWXT reporting of the invention pursuant to the Prime Contract and identifying the cognizant DOE/NNSA program official in the invention disclosure;
- (2) BWXT electing in writing to retain title to the invention at the time of disclosure or within two years of disclosure;

- (3) Representation after reasonable internal inquiry that the invention falls within this Class Waiver;
- (4) Representation to its best knowledge and belief and after reasonable internal inquiry that the invention does not fall within international agreements or treaties of the Government; and
- (5) Representation that BWXT will attempt to commercialize the invention through its licensees within five years from the time the waiver is effective.

After review of the invention disclosure and relevant facts, the NNSA Patent Counsel (herein Patent Counsel), or other NNSA patent attorney designated by said Patent Counsel, will certify whether the waiver is applicable to the invention.

Except as hereinafter provided with respect to inventions funded by or through DOE/NNSA's Defense Programs, herein "DP-funded inventions", the election for inventions shall become effective sixty (60) days after receipt by Patent Counsel, unless the Patent Counsel shall return the election with reasons for failure to accept the election, as set forth in this Class Waiver, or Patent Counsel makes a request for a one-time extension of thirty (30) days.

It is recognized that significant research and development under the Prime Contract is funded by DOE/NNSA that result in valuable patentable technology. It is further noted that the ownership of such patentable technology by BWXT, in all instances, would not compromise national security or DOE/NNSA's program or patent position by application of appropriate safeguards.

The fact that certain inventions arising under DOE/NNSA funding may fall within the scope of this Class Waiver requires that particular attention be given to each invention to ensure that the transfer of technology would not directly or indirectly compromise national security or other aspects of this sensitive program, as specifically prescribed in 48 C.F.R. 927.370.

With regard to any invention that BWXT reports with an election to retain title, BWXT shall, to its best knowledge or belief, provide to Patent Counsel a supporting statement with reasons, addressing:

- (1) Whether National Security will be compromised by development, commercialization or licensing activities involving the invention;
- (2) Whether sensitive technical information (classified or unclassified) under the Naval Nuclear Propulsion Program or the Nuclear Weapons Programs or other defense activities of the DOE/NNSA, for which dissemination is controlled under Federal Statutes and regulations, will be released to unauthorized persons;
- (3) Whether failure to assert such a claim (i.e., failure by DOE/NNSA to retain title to a subject invention) will adversely affect the operation of the Naval Nuclear Propulsion Program or the Nuclear Weapons Program or other defense activities of the DOE/NNSA; and

- (4) Whether there is any Export Controlled information or material present and, if so, how such information or material will be protected.

Additionally, BWXT shall provide a statement of any safeguards it proposes to protect national security while commercializing the subject matter of the invention.

All elections of inventions covered by this section of the class waiver shall be subject to the independent concurrence of a designated DOE/NNSA Program Official, in addition to the approval of the Patent Counsel. The Patent Counsel shall base the approval determination on the written election and any notifications provided in paragraph (J), of the Technology Transfer Clause of the subject M&O Prime Contract as of the date of approval of this Waiver. The concurrence of the designated DOE/NNSA Program Official shall be based on a review of the national security impact of the election including the items set forth above, and the approval of such election by Patent Counsel shall not be effective until such concurrence has been provided to Patent Counsel. DOE/NNSA shall use best efforts to provide approval and concurrence within 10 business days of the date that a complete election is received.

Furthermore, if DOE/NNSA has expended federal funds to patent or pay any fees in relation to an invention that BWXT is seeking title under this waiver, the Patent Counsel, in his or her discretion, may require BWXT to reimburse DOE/NNSA for these expenditures before approving BWXT's waiver request.

This waiver of the Government's rights in BWXT inventions as set forth herein is subject to the Government's retention of: (1) a nonexclusive, nontransferable, irrevocable, paid-up license to practice or to have practiced for or on behalf of the United States the waived inventions throughout the world, and (2) march-in rights in accordance with the attachment hereto entitled "March-In Rights."

#### Class Waiver After Lapse of Two-Year Election Time Limit

In a second particular, the scope of this Class Waiver is directed to and includes U.S. and foreign patent rights to identified subject inventions made in the performance of the Prime Contract for the Pantex Plant managed by BWXT that were electable under the conditions set forth above, but for which a request for waiver of Government rights is submitted after the expiration of the two-year period for making such an election.

The scope of this waiver also includes those electable subject inventions that BWXT has previously indicated, in writing or otherwise, that they do not desire to take title and for which an inventor employee of BWXT, with permission of BWXT, seeks title.

Excluded from the scope of this Class Waiver are inventions which (1) fall within DOE/NNSA's weapons programs that principally relate to weapons or inherently disclose or suggest a weapons application where such disclosure or suggestion would be detrimental to national security, relate to naval nuclear propulsion, relate to uranium enrichment (including isotope separation), relate to storage and disposal of civilian high level nuclear waste or spent nuclear fuel; (2) relate to subject matter that is classified or sensitive under section 148 of the Atomic Energy Act of 1954, as amended, or Executive Order 12958; (3) fall within the scope of international

agreements or treaties, (4) are subject inventions covered by existing or future Class Waivers granted to third parties with DOE/NNSA, such as, but not limited to “Work for Others” or “CRADAs”; or (5) are within any further exceptions that may, in the national interest, be unilaterally designated by the Secretary of Energy or a designee.

Because this waiver includes inventions in which the two-year period of election has expired, the invention may not be available for waiver due to licensing and related activities carried out by the Assistant for Licensing of the Office of Assistant General Counsel for Technology Transfer and Intellectual Property at DOE Headquarters in Washington D.C. In order to assess any prior commitments or on-going negotiations for licenses and related activities in DOE/NNSA-owned patents, the Patent Counsel or designee will confer with said Assistant for Licensing to determine the availability of any invention for application of this waiver.

Furthermore, if DOE/NNSA has expended federal funds to patent or pay any fees in relation to an invention that BWXT is seeking title under this waiver, the Patent Counsel, in his or her discretion, may require BWXT to reimburse DOE/NNSA for these expenditures before approving BWXT’s waiver request.

This waiver of the Government's rights in BWXT inventions as set forth herein is subject to the Government's retention of: (1) a nonexclusive, nontransferable, irrevocable, paid-up license to practice or to have practiced for or on behalf of the United States the waived inventions throughout the world, and (2) march-in rights in accordance with the attachment hereto entitled "March-In Rights."

#### Class Advance Waiver to Participants' Inventions

In another particular, the scope of this Class Waiver is directed to an advance waiver to the Participant of inventions made by employees of, or persons acting on behalf of Participants under the class of CRADAs entered into by Participants with BWXT under the M&O Contract, pursuant to the Technology Transfer mission of the DOE/NNSA. Since CRADAs do not fall within the definition of "funding agreements" of Public Law 96-517, the patent policy set forth therein as applicable to small businesses and non-profit organizations does not apply. Hence, inventions made by any small business, non-profit organization or for-profit large business Participants to the CRADAs are intended to be covered by this Class Waiver.

With respect to the advance Class Waiver to the class of CRADAs above, it is expected that BWXT will negotiate agreements that provide for a substantial cost sharing of the joint research effort by the Participants, thereby achieving a leveraging of the Government-funded portion of the joint work. In so doing, this advance Class Waiver is seen to be an extension of existing DOE/NNSA patent waiver policy which recognizes that substantial cost sharing by Participants is an indication of commitment by the Participants to advance the technology and effect commercial utilization. Additionally, the work being performed under CRADAs will typically be driven by Participants' needs and will most likely be of near term commercial value; hence, it is believed that the granting of the Class Advance Waiver of inventions made by Participants under CRADAs will also make the benefits of the CRADA research widely available to the public in the shortest practicable time and promote the commercial utilization of the waived inventions.

Further, it is believed that technology transfer will be enhanced by both BWXT and the CRADA Participant, as appropriate, being able to offer, for commercialization purposes, waived inventions with other related inventions and intellectual property.

Implementation of the Class Advance Waiver is to be by execution of the CRADA by the DOE/NNSA. Participants' cost of filing and maintaining any patent application(s) or patent(s) on their inventions will be at Participant's private expense.

It is expected that in negotiating the commercialization rights to the waived inventions (including background inventions owned by the parties, if any), BWXT and the Participant will be guided by their respective equities, the small business status of the Participant, if applicable, and the overall objective of attempting to secure the most expeditious commercialization route for moving the technology from the research state to the marketplace.

This Class Advance Waiver of the Government's rights in inventions to Participant, as set forth herein is subject to (1) the Government's retention of a non-exclusive, non-transferable, irrevocable, paid-up license to practice or to have practiced for or on behalf of the United States the waived invention throughout the world, (2) a preference for United States industries as set forth in 35 U.S.C. 204, (3) march-in rights comparable to those set out in 35 U.S.C. 203, and (4) the provisions of the Management & Operating Contract with DOE/NNSA, including the Patent Rights, Rights in Data, and Technology Transfer Mission clauses..

#### Summary

The grant of this Class Waiver should not result in adverse effects on competition or market concentration. Waived inventions will be subject to a royalty-free license to the Government and DOE/NNSA has the right to require periodic reports on the utilization or the efforts at obtaining utilization that are being made for the waived inventions. If BWXT or Participant is not making reasonable efforts to utilize a waived invention, DOE/NNSA can exercise its march-in rights and require licensing of the invention.

Accordingly, in view of the statutory objectives to be obtained and the factors to be considered under DOE/NNSA's statutory waiver policy, and the objectives of Executive Order 12591, all of which have been considered, it is recommended that this Class Waiver as set forth above will best serve the interest of the United States and the general public. It is therefore recommended that the waiver be granted.

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Jim C. Durkis  
Patent Attorney  
NNSA Service Center

Based on the foregoing Statement of Considerations, it is determined that the interest of the United States and the general public will best be served by waiver of United States and foreign patent rights as set forth herein and, therefore, the waiver is granted. This waiver shall not affect any waiver previously granted.

CONCURRENCE:

\_\_\_\_\_  
David Beck  
Assistant Deputy Administrator for  
Military Applications and Stockpile  
Operations, Defense Programs

Date: \_\_\_\_\_

\_\_\_\_\_  
Everett Beckner  
Deputy Administrator for Defense  
Programs, NNSA

Date: \_\_\_\_\_

APPROVAL:

\_\_\_\_\_  
Paul A. Gottlieb  
Assistant General Counsel for  
Technology Transfer and  
Intellectual Property

Date: \_\_\_\_\_

March-In Rights

- (1) BWXT Pantex, LLC, (BWXT) agrees with respect to any Subject Invention in which it has acquired title, that the DOE/NNSA has the right, in accordance with procedures in 35 U.S.C. 203, 48 C.F.R. 27.304-1(g), 37 C.F.R. 401.6 and any supplemental regulations of the DOE/NNSA, to require BWXT, an assignee or exclusive licensee of a Subject Invention to grant a nonexclusive, partially exclusive or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances; and if the BWXT, assignee or exclusive licensee refuses such a request, the DOE/NNSA has the right to grant such a license itself if the DOE/NNSA determines that:
  - (a) Such action is necessary because BWXT or assignee or each licensee has not taken or is not expected to take, within a reasonable time, effective steps to achieve practical application of the Subject Invention in such field of use;
  - (b) Such action is necessary to alleviate health or safety needs that are not reasonably satisfied by BWXT, assignee or their licensees;
  - (c) Such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by BWXT, assignee or licensees; or
  - (d) Such action is necessary because the agreement required by 35 U.S.C. 204 has not been obtained or waived or because a licensee of the exclusive right to use or sell any Subject Invention in the United States is in breach of such agreement.
  
- (2) BWXT agrees with respect to any Subject Invention in which it has acquired title, that the DOE/NNSA has the right at the end of the 5 year period in which BWXT has agreed to attempt to commercialize the invention set forth in the Statement of Considerations hereof to require BWXT to grant a nonexclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant(s) upon terms that are reasonable under the circumstances, provided such grant does not cause a termination of an existing licensee's right to use the invention; and, if BWXT refuses such request, to grant such a license itself, if the DOE/NNSA determines that BWXT has not made a satisfactory demonstration that it or its licensee(s) is actively pursuing such commercialization.

Before requiring licensing under paragraph (2) above, DOE/NNSA shall furnish BWXT a written notice of its intentions to require BWXT to grant the stated license, and BWXT shall be allowed 30 days (or such longer period as may be authorized by the Contracting Officer) for good cause shown in writing by BWXT after such notice to show cause why the license should not be required to be granted.