

STATEMENT OF CONSIDERATIONS

CLASS WAIVER OF THE GOVERNMENT'S U.S. AND FOREIGN PATENT RIGHTS
IN CERTAIN IDENTIFIED INVENTIONS MADE IN THE COURSE OF OR UNDER
MANAGEMENT AND OPERATING CONTRACT DE-AC05-84OR21400 BETWEEN THE
DEPARTMENT OF ENERGY AND MARTIN MARIETTA ENERGY SYSTEMS, INC.;
W(C)-90-011; ORO-467

The Department of Energy (DOE), unlike most other Government agencies, employs contractors, both for profit and nonprofit organizations, to manage and operate certain of its major research, production and weapons facilities. Martin Marietta Energy Systems, Inc. (Energy Systems), a for profit corporation, under prime Contract DE-AC05-84OR21400 (21400 Contract) with DOE manages and operates certain of the Government-owned facilities in Oak Ridge, Tennessee.

These Government-owned, Contractor-operated facilities have for some forty years benefited DOE and its predecessor agencies in carrying out agency research, development, and demonstration programs. Such facilities have, in great measure, had a remarkable record of scientific and technical success. This success is due, in part, to the unique contractual relationship that exists between DOE and its management and operating (M&O) contractors; viz., the dedication of both technical and administrative skills of a private organization, such as Energy Systems, to a significant Federal mission in a close, long-term, cooperative relationship.

Currently, the Department's nonprofit M&O contractors have the right to retain title to inventions made in the performance of their prime contract with DOE pursuant to Title 35 U.S.C. 202 (Public Law 96-517), as amended by Public Law 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 18, Title 35 of the United States Code.

DOE 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 Federal Non-Nuclear Energy Research and Development Act of 1974 (42 U.S.C. 5908), precluded DOE from automatically granting title to its large for profit contractors pursuant to the President's Memorandum.

Energy Systems, like other of the Department's for-profit M&O contractors, currently has the right to file identified waiver petitions on inventions made in the performance of the 21400 Contract. This process imposes a substantial front end administrative burden--both on the Department and on Energy Systems--on preparing and processing such individual waiver petitions. The DOE has, however, granted under the authority of Section 9 and Section 152 of the above-noted Acts a total of 86 identified waiver requests to Energy Systems under the 21400 Contract since 1985 which represents essentially 100% of all waiver requests maintained by Energy Systems before the Department.

With the overall goal of incorporating the research results from Energy Systems' 21400 Contract into the main stream 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 by Energy Systems under the 21400 Contract as set forth herein.

The scope of this Class Waiver is directed to the class of identified inventions which comprises subject inventions made by employees of Energy Systems in the performance of the 21400 Contract. It is thus intended to treat Energy Systems substantially the same as M&O contractors which are small business or nonprofit organizations. More specifically, the scope of the Class Waiver shall include U.S. and foreign patent rights to identified inventions made in the performance of the 21400 Contract for the facilities managed by Energy Systems in Oak Ridge. Excluded from the scope of this Class Waiver are inventions which: (1) fall within DOE's weapons programs, which invention 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) program; relate to storage and disposal of civilian high level nuclear waste or spent nuclear fuels; (2) relate to subject matter that is classified or sensitive under Section 148 of the Atomic Energy Act of 1954, as amended; (3) come within the ambit of international agreements or treaties in existence at the time of execution of the contract modification effecting this Class Waiver in the 21400 Contract, (4) are subject inventions covered by existing or future Class Waivers granted to third parties by DOE, such as "Work for Others" or (5) fall within any further exceptions that may, in the national interest, be designated by the Secretary and are added by unilateral amendment by DOE to the 21400 Contract. This Class Waiver does not include inventions of subcontractors under the 21400 Contract.

Most of the inventions made under the 21400 Prime Contract require additional development before they are available in the commercial marketplace. This is because many of the inventions made by Energy Systems are founded upon basic or advanced research. Additionally, many of these inventions are conceptual in nature and are on a laboratory or 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 energy research will require substantial capital in order to translate the invention 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 these inventions to bring forth private risk capital to expeditiously promote and move the technology into the commercial marketplace and thereby make the benefits of DOE's programs widely available to the public in the shortest practicable time.

Additionally, under the authority of the "National Competitiveness Technology Transfer Act of 1989" (P.L. 101-189) Energy Systems is authorized to enter into Cooperative Research and Development Agreements (CRADAs) with universities, the private sector and other Federal laboratories 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, Energy Systems will be able to combine, where appropriate, these waived inventions with those waived under the separately issued Class Waiver for CRADAs through license agreements with cost-sharing participants under the CRADAs, thereby enhancing 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 to take advantage of the technology transfer capabilities of Energy Systems which has over the last 5 years established and operated a very successful technology transfer program including the granting of 46 licenses covering 29 waived inventions and seven released copyrights. During this period royalty receipts from the licensing activities are in excess of \$1.2 million and commercial sales by licensees (based on running royalties received) are in excess of \$30 million. Permitting Energy Systems to retain title to a broad range of important energy-related inventions, except those imbued with the national interest, should further enhance the technology transfer initiatives of the Department through Energy Systems' 21400 Contract.

Under Modification M047 which established technology transfer as a mission of the laboratory under the authority of P.L. 101-189, technology transfer is currently an element in the award fee determination. This evaluation of Energy Systems' performance serves as an additional justification for the grant of this Class Waiver as set forth herein.

Lastly, Energy Systems has agreed to attempt to commercialize the waived inventions within five years from the time the waiver is effective as set forth in subparagraph (c)(3)(i) of Article I.87 DOE PR 9-9.107-5(a) Patent Rights (long form) (Dec. 1981) (Deviation) of the extension of the 21400 Contract. This commitment to early commercialization by Energy Systems will best promote the commercial utilization of such inventions

and make the benefits of the research effort conducted under the 21400 Contract widely available to the public in the shortest practicable time, consistent with the objectives and considerations of DOE's waiver regulations.

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

- (1) Energy System reporting of the invention within the times specified in the 21400 Contract and identifying by DOE B&R code the funding sponsor in the invention disclosure;
- (2) Energy Systems electing in writing whether or not to retain title to the invention at the time of disclosure or within one year of disclosure;
- (3) Representation after reasonable internal inquiry that the invention falls within the Class Waiver; and
- (4) Representation to its best knowledge and belief that the invention does not fall within international agreements or treaties of the Government which are listed in Exhibit A of the 21400 Contract.
- (5) Representation that it will attempt to commercialize the invention through its licensees within five years from the time the waiver is effective as set forth in subparagraph (c)(3)(i) of Article I.87.

After review of the invention disclosure and relevant facts, Patent Counsel, Oak Ridge Operations Office (herein Patent Counsel) will certify whether the waiver is applicable to the invention.

Except as hereinafter provided with respect to DOE's Defense Programs 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.

As noted above, the scope of this Class Waiver does not include two types of DOE Defense Programs funded inventions: (1) inventions which fall within DOE'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 or (2) inventions which relate to subject matter that is classified or sensitive under Section 148 of the Atomic Energy Act of 1954, as amended. These inventions are, accordingly, not available for election under this Class Waiver and if Energy Systems desires greater rights in these inventions than that accorded in paragraph (e) of Article I.87 then identified waiver petitions must be pursued.

It is recognized that significant research under the 21400 Contract is funded by DOE's Weapons Programs which results in valuable patentable

technology. It is further noted that the ownership of such patentable technology by Energy Systems, in all instances, would not compromise national security or DOE's program or patent position by application of appropriate safeguards.

The fact that certain inventions arising under DOE's Weapons Programs 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 which Energy Systems reports with an election to retain title, Energy Systems shall, to its best knowledge or belief, provide to Patent Counsel a supporting statement with reasons, addressing:

- (i) Whether National Security will be compromised by development, commercialization or licensing activities involving the invention;
- (ii) 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, for which dissemination is controlled under Federal Statutes and regulations, will be released to unauthorized persons;
- (iii) Whether failure to assert such a claim (i.e., failure by DOE 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; and
- (iv) Whether there is any Export Controlled material present and, if so, how such material will be protected.

The election for Defense Programs' inventions falling outside the Weapons exception of (b)(1)(C) of Article I.87 shall not be effective until approved by the Patent Counsel, who shall use his best efforts to reach a determination within ninety (90) days. The Patent Counsel shall base the determination on the review of the written election containing the items set forth above and paragraph J of Article H.22 Technology Transfer (Aug. 1990) and Energy Systems' representation whether there is any Export Controlled material present and if so how such materials will be protected. Additionally, Energy Systems shall provide a statement of any safeguards it proposes to use to protect national security in commercializing the subject matter of the invention.

In the interim, pending the grant of the Class Waiver Energy Systems has submitted a number of identified waiver petitions on subject inventions. These inventions are of importance to the commercialization efforts by Energy Systems under its Technology Transfer Program. An expedited processing of these timely submitted waiver petitions, such as would be effectuated by inclusion in this Class Patent Waiver grant, is highly

desirable and would greatly reduce the paper work associated with processing each such waiver on a case-by-case basis. Accordingly, the scope of this Class Waiver shall include inventions made by Energy Systems employees on which a timely filed waiver request is pending as of the effective date of this Class Waiver. Further, this Class Waiver shall not apply to any invention which DOE has advertised as being available for licensing.

This waiver of the Government's rights in inventions as set forth herein is subject to the Government's retention of: (1) 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, and (2) march-in rights in accordance with paragraph (j)(1) of Article I.87.

Inasmuch as Energy Systems has the right to elect to retain title under this Class Waiver to all inventions made under the 21400 Contract falling outside the exceptional circumstance technologies and other Class Waivers without a showing of adequate plans and intentions for commercializing each invention as previously required in processing identified waiver petitions, DOE has, in addition to the standard Government march-in rights set forth in subparagraph (j)(1) of Article I.87, the right to require Energy Systems to grant to responsible applicant(s) a license(s) as specified in subparagraph (j)(2) of Article I.87.

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 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 Energy Systems is not making reasonable efforts to utilize a waived invention, DOE can exercise its march-in right and require licensing of the invention.

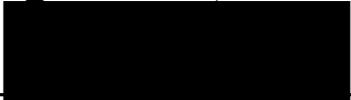
Accordingly, in view of the statutory objectives to be obtained and the factors to be considered under DOE's statutory waiver policy, the objectives of Public Law 101-189, and Executive Order 12591, all of which have been considered, it is recommended that this Class Waiver as set forth above will best serve the interest of the United States and the general public. It is therefore recommended that the waiver be granted.



Robert M. Poteat
Patent Counsel
Oak Ridge Operations Office

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 subject to the terms of the 21400 Contract as amended in M047 to implement this Class Waiver. This waiver shall not affect any waiver previously granted.

CONCURRENCE:


Michael Davis
Assistant Secretary
Conservation and Renewable Energy

Date: 11/23/90

Robert H. Gentile
Assistant Secretary
Fossil Energy

Date: _____

James F. Decker
Acting Director
Office of Energy Research

Date: _____

Sheldon L. Kahalas, Director
Office of Research and
Advanced Technology
Defense Programs

Date: _____

Linda G. Stuntz
Deputy Undersecretary for
Policy, Planning and Analysis

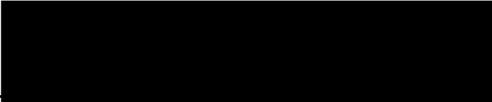
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CONCURRENCE:

William H. Young
Assistant Secretary
Nuclear Energy

Date: _____

APPROVAL:


Richard E. Constant
Assistant General Counsel
for Patents

12/20/90

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Date: 12/17/90

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 Deputy Undersecretary for
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Date: undated

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 William H. Young
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12/20/90

Substitute for (c)(3)(i) of I.87 the following new subparagraph

(3) (Deviation) the written election of title shall include the following representations by Contractor:

(i) Contractor will attempt to commercialize the Subject Invention through its Licensees within five years from the time the waiver is effective as to the invention subject to extensions of the time period for commercialization, in two-year intervals, so long as Contractor demonstrates to the satisfaction of the DOE that it or its Licensee(s) is actively pursuing commercialization of the Subject Inventions. A satisfactory demonstration that the Contractor or its licensee(s) is actively pursuing commercialization of the invention may be met where: (1) the Contractor has activities underway, directed toward expeditious commercialization; or (2) the Contractor has licensed the waived invention and the license includes a commercialization plan with milestones for early commercialization of the invention and the licensee is meeting the agreed to commercialization plan.