STATEMENT OF CONSIDERATIONS

REQUEST BY UNITED SOLAR SYSTEMS CORPORATION FOR AN ADVANCE WAIVER OF U.S. AND FOREIGN RIGHTS UNDER SUBCONTRACT NO. NREL-ZAN-3-13318 UNDER DOE PRIME CONTRACT NO. DE-AC36-83CH10093, WAIVER NO. W(A)-94-020, CH0836.

The attached petition by United Solar Systems Corporation (hereafter United Solar) is for an advance waiver of patent rights under Subcontract No. NREL-ZAN-3-13318, under DOE Contract No. DE-AC36-83CH10093. United Solar requests that the Department of Energy grant an advance waiver for the domestic and foreign rights to inventions developed in the performance of the above identified subcontract without limitation as to field of use and that these rights will be retained by United Solar subject to the standard Advance Waiver Patent Rights Clause with the enclosed U.S. Competitiveness paragraph as previously agreed to. Additionally, United Solar has accepted the standard background patent and data provisions for licensing of third parties and has agreed that the advance waiver of the Government's rights in inventions developed under the cited subcontract will be subject to the usual march-in rights, U.S. manufacturing preference, and U.S. Government license as set out in 35 U.S.C. 202-204.

The scope of work under the above subcontract involves:

a three year research and development program for development of high performance two-terminal, multibandgap, multijunction, amorphous silicon alloy cells having a stable cell efficiency of at least 12.4%;

determining the limits and potential of all amorphous silicon alloy multijunction cell and module performance; and

investigating a-Si and a-SiGe mid-bandgap and low-bandgap alloy material for use in the middle and bottom cell of a triple-junction structure.

As indicated in Answer 8 of the petition, United Solar plans to build a manufacturing facility having a 10 MW capacity together with further R&D work in addition to that to be performed under the contract. They estimate this additional effort to have a value of $30 million and indicate that the subject NREL subcontract will benefit from this effort. In addition, as is indicated in Answer 8, United Solar has invested over $170 million to date in R&D for photovoltaic materials, processing techniques and fabrication machinery which will be utilized in the performance of the subcontract.

The proposed subcontract would cover a three (3) year performance period, at an estimated cost of $2,600,000, with United Solar cost sharing at a rate of 50% ($1,300,000) of the estimated total cost.

According to Answer 5 of the United Solar petition, United Solar has been involved in research, development, and manufacturing in the area of amorphous thin film solar cell products since July, 1990. They have over 140 patents in the subject technology and have several efficiency records with regards to solar cell efficiency.

Petitioner, in Answer 9, indicates that they intend to commercialize inventions arising from the subject subcontract on their own. They further contend in Answer 10 that granting of the waiver should not have an adverse effect on competition or market concentration since the results of the proposed subcontract will promote new technology by competitors in the field of amorphous thin film solar cells.

In Answer 10, Petitioner states that granting of the advance waiver is a necessary condition to the Petitioner's accepting the contract and providing the matching funds.

In summary, United Solar will cost share at a rate of fifty percent. Granting the waiver will improve United Solar's position in commercializing the developed technology and will further encourage United Solar to increase its capital investment in this field. To promote U.S. Competitiveness, United Solar has agreed to the attached U.S. Competitiveness provisions, subject to the approval of the requested waiver.

Upon evaluation of the Waiver Petition and in view of the objectives and considerations set forth in 41 CFR 9-9.109-6, all of which have been considered, it is recommended that the requested waiver be granted.

[redacted]

Bradley W. Smith
Patent Attorney
Intellectual Property
Law Division

Date: 9/25/94

Based on the foregoing Statement of Considerations and the representations in the waiver request, it is determined that the interests of the United States and the general public will best be served by a waiver of the patent rights of the scope described above and therefore the waiver is granted. This waiver shall not apply to any modification or extension of this subcontract where through such modification or extension, the purpose, scope, or cost of the agreement is substantially altered.

Concurrence:

[redacted]

Robert H. Annan
Director, Office of
Solar Energy Conversion

Date 3/2

Approval:

[redacted]

Paul A. Gottlieb, Acting
Assistant General Counsel
for Technology Transfer
and Intellectual Property

Date 3/2/94

(ix) U.S. Competitiveness

The Subcontractor (waiver recipient) agrees that in the event it elects to commercially manufacture any product embodying any waived invention hereunder, or produce any product through the use of any waived invention hereunder, such product will be manufactured substantially in the United States for a period of five (5) years after the expiration date of this contract, unless the subcontractor can demonstrate to DOE, under the standard of commercial reasonableness, that it is not commercially feasible to do so.

In the event that Subcontractor or assignee transfers title in any subject invention or patent or patent application based thereon to, or Subcontractor or any assignee becomes, a company or an entity which is majority owned by a non U.S. company or entity, then Subcontractor or assignee as the case may be, at DOE's request, shall grant nonexclusive sublicenses under such subject invention, patent and/or patent application to U.S. owned or controlled companies identified to Subcontractor or assignee by DOE, under fair and reasonable terms, with one-half of the consideration of such sublicenses inuring to Subcontractor or its assignee and one-half inuring to the Government: and without obligating Subcontractor, any assignee or licensee to grant any licenses, in the event that Subcontractor, any assignee or licenses elects to grant non-exclusive licenses to non-affiliated third parties under any subject invention or patent or patent application based thereon, Subcontractor, assignee or licensee as the case may be will give preference to U.S. manufacturers who have demonstrated capability of providing high quality products or services.

The Subcontractor agrees that it will not license or assign any waived invention to any entity unless that entity agrees to these same requirements.

(4) Terminations.

(i) Any waiver or retention of rights by the Contractor under paragraphs (b)(2), (c)(1), or (c)(2) of this clause may be terminated at the discretion of the Secretary or his designee, in whole or in part, if the request for waiver or retention of rights by the Contractor is found to contain false material statements or nondisclosure of material facts, and such were specifically relied upon in reaching the waiver determination or the agreement to the retention of rights by the Contractor.

(ii) Any waiver of the rights retained in accordance with paragraph (c)(2), as applied to particular inventions, may be terminated at the discretion of the Secretary or his designee, in whole or in part, if the Contractor fails to comply with the provisions set forth in paragraph (c)(3) and paragraph (d) of this clause, and such failure is determined by the Secretary or his designee to be material and detrimental to the interests of the United States and the general public.

(iii) Prior to terminating any waiver of rights under paragraph (c)(4)(i) or (c)(4)(ii) of this clause, the Contractor will be given written notice of the intention to terminate

WAIVER ACTION - ABSTRACT
W(A)-94-020

REQUESTOR	CONTRACT SCOPE OF WORK	RATIONALE FOR DECISION	DISPOSITION
United Solar Systems Corporation	R&D of two-terminal, multi-bandgap, multi-junction, amorphous silicon alloy cells.	50% cost sharing experience in the technology and prospects for commercialization.	