STATEMENT OF CONSIDERATIONS

REQUEST BY SOLAREX CORPORATION FOR AN ADVANCE WAIVER OF U.S. AND FOREIGN RIGHTS UNDER PROPOSED NREL SUBCONTRACT NO. AAI-3-11061-02-106779 UNDER DOE PRIME CONTRACT NO. DE-AC02-83CH10093, WAIVER NO. W(A)-93-010, CH0761.

The attached petition by Solarex Corporation (hereafter Solarex) is for an advance waiver of patent rights under proposed NREL Subcontract AAI-3-11061-02-106779, under DOE Contract No. DE-AC02-83CH10093. Solarex requests that the Department of Energy grant an advance waiver for the domestic and foreign rights to inventions made in the performance of work under the above identified proposed subcontract and that these rights vest in Solarex subject to the standard march-in, preference for U.S. industry, and the patent rights provisions of the subcontract.

The scope of work under the above subcontract involves using proprietary technology to deploy a total of 10.2 kilowatts of amorphous silicon submodules in three photovoltaic systems. These systems will then be deployed and the performance of the systems analyzed. The work will further the development of amorphous silicon technology and so, further the commercialization of thin film solar cells.

As is indicated in answer 3, Solarex proposes a 25% cost sharing, with NREL at 75%. Solarex's share will amount to \$229,000 out of the total dollar value of the subcontract of \$909,000.

Answers 4 and 5 represent that Solarex is a leader and innovator in the field of solar cell technology and has invested significant financial and personnel resources in the field of amorphous silicon technology. It is currently the largest manufacturer of solar cells in the world. Solarex holds several patents in the field of solar cells and is a licensee of several amorphous silicon patents held by RCA (now General Electric). Solarex is currently engaged in the development of solar cells under a NREL sponsored subcontract (ZM-0-19033-1). To date, Solarex has spent in excess of \$30,000,000 in the development of solar cells.

Solarex, in answer 10, states that granting the waiver will not place it in a dominant commercial position since there are several foreign and domestic companies involved in the research and development of amorphous silicon solar cells. It points out that foreign based companies currently dominate the commercial production of amorphous silicon solar cells, and thus, granting of the waiver will not place Solarex in a dominant commercial position.

Approval of the advance waiver petition will more effectively promote the development and commercial utilization of the subject technology by providing Solarex with the incentive to further develop and commercialize amorphous silicon technology for the manufacture of solar cells.

To promote U.S. Competitiveness, Solarex has agreed to the attached U.S. Competitiveness provisions, subject to the approval of the requested waiver. This is the same U.S. Competitiveness provision used in the PVMAT subcontract between SOLAREX and NREL, Subcontract No. ZM-2-11040-2.

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.



Date: <u>7/14/93</u>

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.



CONCUPRENCE

Robert H. Annan Director Office of Solar Energy Conversion

APPROVAL:



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 subcontract, or until the start-up of commercial production by the Subcontractor (alone or in partnership with others) of a U.S. based commercial plant (annual rated PV module production of at least 10 MW_p) embodying such waived invention, whichever is earlier, 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 prior to such start-up of commercial production or within five (5) years of the expiration date of this subcontract, the Subcontractor, after the demonstration to the DOE provided for above, manufactures or licenses manufacture of products in a foreign country embodying any waived invention hereunder or produced through the use of any waived invention hereunder, which invention is claimed in a U.S. patent, there will be a requirement for a mutually agreed-upon repayment agreement for repayment over a twenty (20) year period of DOE's contribution under the subcontract to the development of such waived inventions.

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