## STATEMENT OF CONSIDERATIONS

## REQUEST BY UNITED TECHNOLOGIES CORPORATION FOR AN ADVANCE WAIVER OF PATENT RIGHTS UNDER DOE COOPERATIVE AGREEMENT NO. DE-FG36-O5GO15151 ENTITLED "ORGANIC RANKINE CYCLE (ORC) FOR GEOTHERMAL ELECTRICAL POWER SYSTEM VALIDATION "; W(A)-05-021; CH-1285

As set out in the attached waiver petition and in subsequent discussions with DOE Patent Counsel, United Technologies Corporation (UTC) has requested an advance waiver of domestic and foreign patent rights for all subject inventions made under the above-identified cooperative agreement by its employees and its subcontractor's employees, regardless of tier, except inventions made by subcontractors eligible to retain title to inventions pursuant to P.L. 96-517, as amended, and National Laboratories.

Referring to item 2 of UTC's waiver petition, the objective of this agreement is to develop and demonstrate the feasibility of producing electricity at a cost of less that 5¢/kW from a 165°F geothermal resource with 98 percent availability. Under the agreement, UTC will develop, install and operate a two-module 400kw power plant in cooperation with Chena Hot Spring Resort, located about 60 miles NW of Fairbanks, Alaska. The project will be completed in three phases over a period of 34 months at a total cost of \$2,513,028. UTC is obligated to cost share \$1,250,000, or about 50 percent of the total cost of the project.

In view of the cost sharing and other equities between UTC and its subcontractors, it is anticipated that the parties will develop an appropriate allocation of patent rights among the participants to facilitate the expeditious development of the technology forming the subject matter of the agreement. Accordingly, DOE will waive title to all subject inventions made by UTC's employees and its subcontractors' employees, regardless of tier, except inventions made by subcontractors eligible to retain title pursuant to P.L. 96-517, as amended, or National Laboratories, to UTC or its subcontractors, as mutually agreed by the parties. Except as otherwise approved in writing by DOE Patent Counsel, a party's acceptance of a subcontract under this agreement, at any tier, shall constitute UTC's certification that it has provided that party with a copy of this Statement of Considerations and that party's notice to DOE that it

accepts the terms and conditions of this advance waiver. Additionally, subcontractors who receive title under this waiver shall notify DOE Patent Counsel in writing of such disposition of patent rights.

Referring to items 5-9 of UTC's waiver petition, UTC is a multi-national corporation with recognized expertise and high quality products in many markets. With respect to the work under this agreement, UTC has had extensive development and manufacturing experience with turbines, fuel cells, electrical generators and converters. This, coupled with UTC's cost sharing, clearly demonstrates the likelihood that UTC will continue development and commercialization of the results of this agreement.

This advance waiver of the Government's rights in inventions is subject to the usual government license, march-in rights, and preference for U.S. industry provisions set out in 35 U.S.C. 202-204. The advance patent waiver also includes the attached U.S. Competitiveness clause (paragraph t) which requires products embodying any waived invention or produced through the use of any waived invention be manufactured substantially in the United States unless the participant can show to the satisfaction of DOE that it is not commercially feasible to do so. The contractor further agrees to make the above condition binding on any assignee, licensee or other entity 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 the waived invention is suspended until approved in writing by DOE.

Referring to item 10 of the waiver petition, granting this waiver is not anticipated to have any adverse impact on competition as there are a variety of competing technologies in the relevant market.

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 agreement in a fashion which will made the technology available to the public in the shortest practicable time. Therefore, upon evaluation of the waiver petition and in view of the objectives

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and considerations set forth in 10 CFR 784, all of which have been considered, it is recommended that the requested waiter be granted.



Thomas G. Anderson Assistant Chief Counsel Intellectual Property Law Division

Date:

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 will 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:

Roy Mink, Program Manager Office of Geothermal Technologies EE-2C

20/06 Date:

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Paul A. Gottlieb Assistant General Counsel for Technology Transfer and Intellectual Property, GC-62

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Date:\_/-23-06

## (t) U. S. COMPETITIVENESS

The Contractor agrees that any products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States unless the Contractor can show to the satisfaction of the DOE that it is not commercially feasible to do so. In the event the DOE agrees to foreign manufacture, there will be a requirement that the Government's support of the technology be recognized in some appropriate manner, e.g., recoupment of the Government's investment, etc. The Contractor agrees that it will not license, assign or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements. Should the Contractor or other such entity receiving rights in the invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license, or other transfer of rights in the waived invention is suspended until approved in writing by the DOE.

## WAIVER ACTION - ABSTRACT W(A)-05-021 (CH-1285)

REQUESTOR UNITED TECHNOLOGIES CORPORATION

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CONTRACT SCOPE OF WORK ORGANIC RANKIN CYCLE (ORC) FOR GEOTHERMAL ELECTRICAL POWER SYSTEM VALIDATION RATIONALE FOR DECISIONDISPOSITION50% COST SHARING