Statement of Considerations

REQUEST BY UNITED TECHNOLOGIES RESEARCH CENTER, FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN RIGHTS IN SUBJECT INVENTIONS MADE IN THE COURSE OF OR UNDER A SUBTIER CONTRACT UNDER SUBCONTRACT NO. 4000009920 UNDER DOE PRIME CONTRACT NO. DE-AC05-00OR22725; DOE WAIVER DOCKET W(A)-04-010 [ORO-787]

Petitioner, United Technologies Research Center(UTRC), has made a timely request for an advance waiver to worldwide rights in Subject Inventions made in the course of or under a subtier contract under Subcontract No 4000009920 with Capstone Turbine Corporation under DOE Prime Contract No. DE-AC05-00OR22725. The scope of this work is to build upon prior work related to the development of an integrated cooling, heating, and power (CHP) system. Under this subtier contract with Capstone Turbine Corporation, UTRC will be responsible for performing detailed technology characterization and benefits quantification for three promising CHP relevant technologies: Energy Storage systems, Micro Grid systems aimed at small scale CHP applications and Desiccant systems. This work is sponsored by the Office of Distributed Energy Resources, Office of Power Technologies.

The total dollar amount of the subtier subcontract is \$825,662 of which Petitioner is cost-sharing 45.5% or \$375,667. The period of performance is six months.

The Petitioner is the central research and development center of United Technologies Corporation (UTC), which is a multi-national corporation with recognized expertise and high quality products in many markets. Included in these are high performance, low emission gas turbine engines for military and commercial aeroengines and ground power gas turbines produced by Pratt & Whitney, including Pratt & Whitney Canada (PWC), a wholly-owned subsidiary of UTC; high performance electrical generators and converters produced by Hamilton Sundstrand (HS); and heating and air conditioning components and systems produced by UTC's Carrier Corporation. According to its waiver petition, Petitioner supports all the UTC business units and has developed technologies that enhance and revolutionize their products. Thus, Petitioner's experience and expertise will contribute substantially to commercialization of the inventions made under the agreement.

UTC has a substantial financial investment directly related to the work to be performed under this agreement. PWC is investing more than \$50M to develop the initial microturbine engine for the ST5 over the next two years. HS invests more than \$10M annually to develop new power generator and converter technology. Petitioner directly receives approximately \$30M annually from UTC for new technology and tool development. Approximately 10% of this value has been aligned with the new technologies of advanced microturbine system.

Petitioner has agreed to the standard DOE waiver terms and conditions, including march-in rights, background patent and data provisions, retention by the government of a license, preference for U.S. industry and U.S. Competitiveness clauses.

Petitioner has agreed 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 Petitioner can show to the satisfaction of DOE that it is not commercially feasible to do so. In the event 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 Petitioner has further agreed to make the above condition binding on any assignee or licensee or any entity otherwise acquiring rights to any waived invention, including subsequent assignees or licensees. Should the Petitioner 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.

Granting of the waiver should have little effect on competition since there are several competing technology options being applied to develop packaged CHP systems.

Furthermore, grant of the requested waiver should serve as encouragement to other DOE contractors and subcontractors that significant cost sharing will be recognized as an acceptable consideration for granting greater rights in Subject Inventions.

In view of the substantial level of cost sharing by Petitioner and the objectives and considerations set forth in 10 CFR 784.4, all of which have been considered, it is recommended that the requested waiver for worldwide rights be granted.

> Emily G/Schneider Assistant Chief Counsel for Intellectual Property

Based on the foregoing Statement of Considerations and the 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 U.S. and foreign patent rights, and therefore, the waiver is granted. This waiver shall not apply to a modification or extension of the cost-shared agreement where, through such a modification or extension, the purpose, scope or cost of the subtier subcontract has been substantially altered.

CONCURRENCE:

William P. Parks Deputy Director Office of Electric Transmission & Distribution, TD-1

APPROVAL:

Paul A. Gottleb

Assistant General Counsel for Technology Transfer

and Intellectual Property