## STATEMENT OF CONSIDERATIONS

Request by UTC Power Corporation for an Advance Waiver of Domestic and Foreign Invention Rights under DOE Cooperative Agreement No. DE-NT0003894;

W(A)-2010-054, CH-1578

The Petitioner, UTC Power Corporation (UTC) was awarded this cooperative agreement for the performance of work entitled "Coal-Based IGFC Project Phase I". The goal of the cooperative agreement relates to the development of solid oxide fuel cell (SOFC) cell and stack technology suitable for use in highly-efficient, economically-competitive central generation power plant facilities fueled by coal synthesis gas (syngas). According its response to question 2, UTC states that the development of this technology will significantly advance the nation's energy security and independence interests while simultaneously addressing environmental concerns, including greenhouse gas emissions and water usage.

The total estimated cost of the cooperative agreement is \$29,263,806, with the DOE share being \$22,000,000, or 75%. Cost sharing of the project by UTC is thus \$7,263,806 or (25%). The period of performance of the agreement is from October 1, 2008 to September 30, 2010.

In its response to questions 5 and 6 of the attached waiver petition, UTC has described its technical competence in the field of solid oxide fuel cells. Specifically, UTC states that it is a subsidiary of United Technologies Corporation, and draws upon the expertise of the United Technologies business units. UTC Power is the world leader in developing and producing fuel cells for on-site power, transportation, space and defense applications, as well as a leader in innovative, renewable energy solutions and combined cooling, heating, and power systems for the distributed energy market. UTC Power has developed fuel cell power plants for industrial and commercial applications, and for special use applications by the U.S. and foreign governments. UTC states that UTC Power currently manufactures and sells the PureCell® System Model 400 System that produces 400 kilowatts of power. UTC's technological experience demonstrates its expertise in the field of solid oxide fuel cell technologies.

From its response to question 10, UTC states that grant of the waiver is not anticipated to have any adverse impact on competition UTC Power is one of four industrial teams funded by DOE to develop solid oxide fuel cell and stack technology suitable for use in highly efficient, economically competitive, central generation power plant facilities fueled by coal syngas. It is unlikely that competition will be adversely affected by grant of the waiver.

The subject cooperative agreement will be modified to add the Patent Rights--Waiver clause in conformance with 10 CFR 784.12. This waiver clause will also include a paragraph entitled U.S. Competitiveness, in which UTC agrees to substantial U.S. manufacture of subject inventions (attached hereto). Additionally, UTC agrees not to transfer subject inventions to any other entity unless that other entity agrees to these same requirements.

UTC agrees to submit copies of issued U.S. Patents resulting from waived inventions, and to submit annual reports on the utilization of a waived invention or on efforts at obtaining such utilization that are being made by the UTC or any of its licensees or assignees.

Considering the foregoing, it is believed that granting the waiver will provide the Petitioner with the necessary incentive to invest resources in the commercialization of the results of the agreement in a fashion which will make the agreement's benefits available to the public in the shortest practicable time. In addition, it would appear that grant of the above requested waiver would not result in an adverse effect on competition nor result in excessive market concentration. Therefore, in view of the objectives and considerations set forth in 10 CFR 784, all of which have been considered, it is recommended that the requested waiver, as set forth above, be granted.

Mark P. Dvorscak
Deputy Chief Counsel
Office of Intellectual Property Law

DEC 27 Date

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

CONCURRENCE:

APPROVAL:

James F. Wood
Deputy Assistant Secretary for Clean Coal
Office of Clean Coal Energy Research
FE-20

Date 7 2012

John T. Lucas
Assistant General Counsel
for Technology Transfer and
Intellectual Property

Date

(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.

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