STATEMENT OF CONSIDERATIONS

Request by Rolls-Royce Fuel Cell Systems, Inc for an Advance Waiver of Domestic and Foreign Invention Rights under DOE Contract No. DE-FC26-08NT01911, W(A) 2010-033, CH-1566

The Petitioner, Rolls-Royce Fuel Cell Systems, Inc (Rolls Royce) was awarded the subject cooperative agreement with DOE for the performance of work entitled, "Evaluation of Reformer Produced Synthesis Gas for Emissions Reductions in Natural Gas Reciprocating Engines." The objective of the work is to demonstrate the benefits of pre-conditioning the natural gas fuel to a reciprocating engine with the injection of a small amount of hydrogen-rich synthesis gas-namely extension of lean combustion limits to significantly reduce emissions and to demonstrate that the hydrogen-rich synthesis gas can be generated from the natural gas. The waiver will apply only to inventions made by Rolls-Royce employees.

The work under this agreement is expected to take place from October 1, 2008 through May 30, 2010. The total amount of the contract is \$615,006, with Rolls-Royce cost-sharing \$123,006 or 20%. DOE is providing the remaining 80% or \$492,000.

In its response to question 5 of the attached waiver petition Rolls-Royce has described its technical competence in the field of fuel processor subsystems. Rolls-Royce states that it acquired the rights to a portion of the existing intellectual property and know-how of certain SOFCo-EFS Holdings LLC assets in 2007. This IP and know-how includes a family of fuel processor subsystems operating on a wide range of fuels. Over the last 15 years, many fuels have been reformed, ranging from natural gas to marine diesel fuel. Non-catalytic and catalytic partial oxidation (CPOX), catalytic autothermal, and steam reformers have all been employed. The systems-based approach to fuel processor development has led to an innovative natural gas reformer that does not require the addition of water. Rolls-Royce states it holds 6 U.S. fuel reforming patents, and lists these patents in response to question 5. It has also attached a paper describing CPOX reforming for LP gas. Rolls-Royce's response demonstrates its technical competency in the field of fuel processor subsystems.

In its response to question 10 of the attached waiver petition, Rolls-Royce states that granting the waiver will not place it in a preferred or dominant position since other competitive technologies are available for reducing emission from reciprocating engines. Each approach to this problem has its own advantages. Rolls-Royce states that this new technology may be developed as a standalone product applicable to numerous engine makes and addresses emission by minimizing their production. Therefore grant of the waiver will have a positive effect on competition and market concentration.

The subject contract will be modified to add the Patent Rights--Waiver clause in conformance with 10 CFR 784.12, wherein Rolls-Royce has agreed to the provisions of 35 U.S.C §§ 202, 203, and 204. This waiver clause will also include a paragraph entitled U.S. Competitiveness, in which Rolls-Royce agrees to substantial U.S. manufacture of subject inventions (attached hereto). Additionally, Rolls-Royce agrees not to transfer subject inventions to any other entity unless that other entity agrees to these same requirements.

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 Intellectual Property Law Division

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 of the scope described, 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:

Henry Kenchington Director, R&D Office of Electricity Delivery And Energy Reliability, OE-10

Date

APPROVAL:

John T. Lucas, Assistant General Counsel for

Assistant General Counsel for Technology Transfer and Intellectual Property, GC-62

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.