

## STATEMENT OF CONSIDERATIONS

### PETITION FOR ADVANCE WAIVER OF PATENT RIGHTS BY ROLLS ROYCE FUEL CELL SYSTEMS (US) INC. ("RRFCS-US") UNDER COOPERATIVE AGREEMENT NO. DE-FE0000303 BETWEEN RRFCS AND DOE; W(A)-2009-064; CH-1535

The Petitioner, RRFCS-US, has requested a waiver of domestic and certain foreign patent rights for all subject inventions that may be conceived or first actually reduced to practice by RRFCS-US arising from its participation under the above referenced cooperative agreement entitled "SECA Coal-Based Systems."

The objective of the project is the development of Solid Oxide Fuel Cell (SOFC) technology for use in high-efficient, economically-competitive central generation power plant facilities fueled by coal synthesis gas. The development of this technology will significantly advance energy security and independence interests while simultaneously addressing environmental concerns, including the reduction of greenhouse gas emissions and water usage.

The total cost of the project is \$11,394,856.00 with the RRFCS-US providing \$2,499,971.00 or about 22% cost sharing.<sup>1</sup> This waiver is contingent upon RRFCS-US maintaining, in aggregate, the above cost sharing percentage over the course of the cooperative agreement.

As noted in its waiver petition, since 1992, RRFCS-US has been developing and maturing its SOFC technology through an investment which exceeds \$290 million dollars. This funding has been directed at the development of a unique SOFC stack and primary sub-systems that comprise the RRFCS-US 1 MW SOFC power system. Of this, approximately 40% has been invested in the fuel cell technology which is the primary subject of the SECA agreement. This work includes development and qualification of lower cost cell and stack materials including substrate, substrate seals, anode and anode current collectors, cathode and cathode current collectors, and primary and secondary interconnectors.

Considering RRFCS-US's technical expertise and significant investment in this technology including sizable cost sharing in this cooperative agreement, it is reasonable to conclude that RRFCS-US will continue to develop and ultimately commercialize the technology and products which may arise from this cooperative agreement.

RRFCS-US has agreed that this waiver shall be subject to the march-in and preference for U.S. industry provisions, as well as the U.S. Government license, comparable to those set out in 35 U.S.C. 202-204. Further, RRFCS-US has agreed to the attached U.S. Competitiveness provision paragraph (t). In brief, RRFCS-US has agreed that products embodying a waived invention or produced through the use of a waived

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<sup>1</sup> At the time of this petition, RRFCS-US anticipated the total cost of the project to be \$11,394,856 with RRFCS-US providing \$2,499,971. As of 2012, the total cost of the project is \$21,135,082 with RRFCS-US providing at least \$5,485,650, or greater than 20% cost share.

invention will be manufactured substantially in the United States unless the RRFCS-US can show to the satisfaction of the DOE that is not commercially feasible to do so.

Referring to item 10 of the waiver petition, granting this waiver is not anticipated to have any adverse impact on competition. If anything, the technology forming the subject matter of the collaboration can be expected to stimulate competition. A number of companies are developing SOFC power systems. Furthermore, the market for distributed power is expected to grow and that competition in this growing market will be significant.

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 cooperative agreement in a fashion which will make the above technology available to the public in the shortest practicable time. Therefore, upon evaluation of the waiver petition and 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 be granted.

  
Joy Alwan  
Patent Attorney  
Intellectual Property Law Division

  
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Deputy Chief Counsel  
Intellectual Property Law Division

Date: 6/6/12

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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 shall 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:

APPROVAL:

  
James F. Wood  
Deputy Assistant Secretary  
for Clean Coal  
FE-20

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

Date: July 19, 2012

Date: 7/23/2012