

STATEMENT OF CONSIDERATIONS

REQUEST FOR ADVANCE WAIVER OF PATENT RIGHTS BY LG FUEL
CELL SYSTEMS INC., UNDER DOE AWARD NO. DE-FE0031180;
W(A)-2018-001, CH-1788

Petitioner, LG Fuel Cells, Inc. requested a waiver of: (a) domestic and foreign patent rights for all subject inventions conceived solely by Petitioner and (b) Petitioner's undivided interest, based on its employee's contributions, to joint domestic and foreign patent rights for all subject inventions conceived, arising under the above referenced award.

The objective of Petitioner's award is solid oxide fuel cell (SOFC) prototype system testing. The prototype system testing includes assembly of the fuel cell vessel; assembly and packaging of the Generator Module and Balance of Plant (BOP); installation and interconnection of the power system packages and connection to the fuel supply and power grid. The scope of work directs commissioning and shakedown testing of the prototype including 5,000 hours of operational testing. The SOFC systems will undergo testing to be conducted in accordance with a DOE-approved test plan.

The original cost of the award is \$7,120,708.00 of which the Government will contribute \$5,696,566.00 in addition to Petitioner's contribution of \$1,424,142.00 (or about twenty percent (20%) of the total cost of the work under the award. This waiver is contingent upon Petitioner maintaining, in aggregate, the above cost sharing over the course of the award. The period of performance is from October 11, 2017 to October 11, 2019.

Referring to items 5-9 of the waiver petition, Petitioner has pursued development of its SOFC technology for more than 20 years. During that period, Petitioner invested more than \$350 million including \$239 million in shareholder and affiliate funding in advancing the technology. Should the continued research succeed, Petitioner and its affiliates have the capability and experience required in large scale, high speed manufacturing and automated assembly in order to bring the technology to market. Petitioner asserts that without the intellectual property protection possible through this waiver, it may be difficult to attract commercial customers and investors who can provide future funding needed for field testing and commercialization as well as facilitate the necessary path to the commercial market.

Petitioner has agreed that this waiver will be subject to the march-in and preference for U.S. industry provisions, as well as the U.S. Government license, set out in 35 U.S.C. 202-204. Further, Petitioner has agreed to the attached U.S. Competitiveness provision (paragraph (t)). Petitioner further has agreed to the attached revised paragraph (h) to submit annual reports on the utilization of a subject invention or on efforts at obtaining such utilization that are being made by Petitioner and any of its licensee or assignees. If sold or transferred this reporting obligation will pass on to the buyer or transferee.

Petitioner has agreed that products embodying a waived invention or produced through the use of a waived invention will be manufactured substantially in the United States unless the

Petitioner can show to the satisfaction of the DOE that it is not commercially feasible to do so. Petitioner has further agreed to make the above conditions binding on any assignee or licensee or any entity otherwise acquiring rights in the waived inventions, including subsequent assignees and licensees. Should Petitioner or other such entity receiving rights in a 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 inventions is suspended until approved in writing by DOE.

Referring to item 10 of the waiver petition, granting this waiver will not have an adverse impact on competition. The field of distributed power generation systems is the subject of significant research across a broad array of technology areas such as wind or solar renewable systems, turbines, and fuel cells. Relating to SOFC research alone, there are numerous entities performing research on a multitude of SOFC system types. For example, DOE recently announced funding to 16 projects relating to SOFC technologies. Thus, granting the Petition will not hinder competition in the field.

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 make the 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.

Jacob A. Heafner
Patent Attorney
Intellectual Property Law Division
DOE ISC-CH

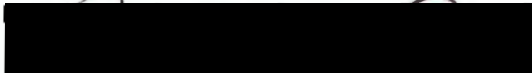
Date: 06/20/2018

Michael J. Dobbs
Deputy Chief Counsel
Intellectual Property Law Division
DOE ISC-CH

Date: 08/20/2018

Based upon the foregoing Statement of Considerations and representations in the attached waiver petition, it is determined that the interests of the U.S. 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 of extension of the award, where through such modification or extension, the purpose, scope or cost of the award has been substantially altered.

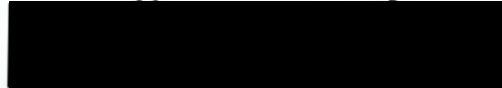
CONCURRENCE:



Regis K. Conrad
Director
Division of Advanced Energy Systems
FE-221

Date: 13 Sep 18

APPROVAL



Brian J. Lally
Assistant General Counsel for Technology
Transfer and Intellectual Property
GC-62

Date: 9/18/18