STATEMENT OF CONSIDERATIONS

PETITION FOR ADVANCE WAIVER OF PATENT RIGHTS BY GE GLOBAL RESEARCH ("GE GLOBAL") UNDER COOPERATIVE AGREEMENT NO. DE-FC36-08GO18181 BETWEEN GE GLOBAL AND DOE; W(A)-09-016; CH-1485

The Petitioner, GE GLOBAL, 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 GE GLOBAL arising from its participation under the above referenced cooperative agreement entitled "300°c Capable Electronics Platform and Temperature Sensor System for Enhanced Geothermal Systems."

The objective of the project is development of geothermal wellbore monitoring applications, through the development of SiC based electronics and ceramic packaging capable of sustained operation at temperatures up to 300°C and 10km depth.

The total cost of the project is approximately \$2 million with the Petitioner providing 20% cost sharing. This waiver is contingent upon the Petitioner maintaining, in aggregate, the above cost sharing percentages over the course of the cooperative agreement.

As noted in its waiver petition, Petitioner has significant experience in the area of silicon carbide based amplifiers. In fact, such amplifiers were first demonstrated over 10 years ago at GE Global Research. GE Global has an active program for the development of SiC power metal oxide semiconductor field effect transistor (MOSFET) and will combine its expertise with that of Auburn University to complete the project. GE has a number of patents and patent applications covering aspects of certain project areas and will have access to GE Global's world-class scientific and engineering resources.

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

Petitioner 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, Petitioner has agreed to the attached U.S. Competitiveness provision paragraph (t). In brief, 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 Sates unless the Petitioner 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. GE

GLOBAL has an extensive history of partnership and licensing arrangements with companies in various commercial markets.

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.

<u>/Brian J. Lally/</u> Brian J. Lally Assistant Chief Counsel Intellectual Property Law Division DOE Chicago Office

Date: September 14, 2009

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:

Edward James Wall Program Manager Office of Geothermal Technology Program EE-2C

Date:

APPROVAL:

Assistant General Counsel for Technology Transfer and Intellectual Property

Date: 3/

WAIVER ACTION - ABSTRACT W(A)-09-016

REQUESTOR GE GLOBAL

depth.

CONTRACT SCOPE The objective of the project is development 20% Cost Sharing of geothermal wellbore monitoring applications, through the development of SiC based electronics and ceramic packaging capable of sustained operation

at temperatures up to 300°C and 10km

RATIONALE FOR DECISION

(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. Contractor's agreement as set forth herein to manufacture in the U. S. will be met if the majority (i.e. at least 51%) of each product embodying any waived invention or produced through the use of any waived invention is manufactured in the U.S.