STATEMENT OF CONSIDERATIONS

REQUEST BY GE ENERGY (USA) LLC, FOR AN ADVANCE WAIVER OF PATENT RIGHTS TO INVENTIONS MADE UNDER COOPERATIVE AGREEMENT DE-FE0007902; W(A)-2012-019; CH-1662

GE Energy (USA) LLC (GE), requests an advance waiver of domestic and foreign patent rights for all subject inventions made under the above cooperative agreement for work entitled, "Scoping Studies to Evaluate the Benefits of an Advanced Dry Feed System on the Use of Low-Rank Coal". Under this agreement, GE will demonstrate the advantage of using GE's new, advanced dry feed system (Posimetric Feed System-PFS) for converting low rank coal to electrical power in an IGCC plant configured for 90% Carbon Capture Utilization and Storage (CCUS). The PFS is centered on GE's proprietary Posimetric Feeder, a mechanical device that behaves like a particulate solids pump and is capable of pressurizing dry, ground coal to over 100 psi – a pressure level that is sufficient for feeding dry coal to a gasifier. Further details of the project are provided in response to question 2 of the attached waiver petition. The waiver is to apply to GE's and its subcontractors' employee subject inventions, except inventions made by subcontractors eligible to retain title to inventions pursuant to P.L. 96-517 as amended.

The work under this cooperative agreement is expected to take place from October 1, 2011 through September 30, 2012, at an anticipated total cost of \$868,992. GE will provide 20% cost share which is anticipated to be \$173,798. DOE will provide the remaining 80%, which is anticipated to be \$695,194. This waiver is contingent on GE maintaining, in aggregate, a cost sharing percentage of at least 20% during the course of the award.

In response to question 5 of its waiver petition, GE states it is one of the world's leading suppliers of power generation and energy delivery technology. It provides equipment, services and management solutions across the power generation, oil and gas, distributed power, and energy rental industries. Over the last 30 years, through commercial and pilot facilities, GE's gasification technology has demonstrated that it can gasify over 90% of bituminous coals. GE has demonstrated its technical competency in the field of power generation and energy delivery technology.

In response to question 10 of its waiver petition, GE states that several other companies are developing dry feed systems and have established their own patent positions. In addition, many companies are involved in developing other technologies for gasification and IGCC applications. Therefore, acquisition of waiver rights by GE Energy will not place GE Energy in a preferred or dominant position in this field, and there is no evidence that grant of the waiver will have a negative effect on competition and market concentration.

This advance waiver of the Government's rights in inventions is subject to the usual advance patent waiver licensing provisions, and the government license, march-in rights, and preference for U.S. industry provisions set out in 35 U.S.C. 202-204. The contractor agrees to the attached revised paragraph (h) to submit annual reports every 12 months (or such longer period as may be specified by the Patent Counsel) from the date of the contract on the utilization of a subject invention or on efforts at obtaining such utilization that are being made by the Contractor and any of its licensee or assignees. The Contractor agrees to submit the annual reports for (10) ten years following the completion of the project period or until the patent is allowed to lapse or expire,

whichever comes first. If sold or transferred, this reporting obligation will pass on to the buyer or transferee for completion of the ten-year period of time.

The advance patent waiver also includes the attached U.S. Competitiveness clause (paragraph t), which requires products embodying any waived invention or produced through the use of any waived invention be manufactured substantially in the United States unless the participant can show to the satisfaction of DOE that it is not commercially feasible to do so. The contractor further agrees to make the above condition binding on any assignee, licensee or other entity acquiring rights to any waived invention, including subsequent assignees or licensees. Should the Contractor or other such entity receiving rights in any 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 invention is suspended until approved in writing by DOE.

In view of the cost sharing and other equities between GE and its subcontractors, it is anticipated that the parties will develop an appropriate allocation of patent rights among the participants to facilitate the expeditious development of the technology forming the subject matter of the agreement, Accordingly, DOE will waive title to all subject inventions made by GE's employees and its subcontractors' employees, regardless of tier, except inventions made by subcontractors eligible to retain title pursuant to P.L. 96-517, as amended, or National Laboratories, to GE or its subcontractors, as mutually agreed by the parties. Except as otherwise approved in writing by DOE Patent Counsel, a party's acceptance of a subcontract under this agreement, at any tier, shall constitute GE's certification that it has provided that party with a copy of this Statement of Considerations and that party's notice to DOE that it accepts the terms and conditions of this advance waiver. Furthermore, a subcontractor has the right to request a waiver from DOE in its own right, rather than having to pass through the contractor to acquire title to subject inventions. Additionally, subcontractors who receive title under this waiver shall notify DOE Patent Counsel in writing of such disposition of patent rights.

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 Part 784, all of which have been considered, it is recommended that the requested waiver be granted.

Mark P. Dvorscak Deputy Chief Counsel Intellectual Property Law Division

Date: June 28, 2012

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 will 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

Date: 10/19/12

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

Date: 10/24/2012

(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.

(h) Reporting on utilization of subject inventions.

The Contractor agrees to submit annual reports every 12 months (or such longer period as may be specified by the Patent Counsel) from the date of the contract on the utilization of a subject invention or on efforts at obtaining such utilization that are being made by the Contractor and any of its licensees or assignees. Such reports may include information regarding the status of development, date of first commercial sale or use, gross royalties received by the Contractor, and such other data and information as DOE may reasonably specify. However, DOE agrees to permit periodic discussions with the Contractor, on the possibility of alternative report contents or reporting schedules which DOE deems sufficient to provide the necessary information on utilization of the subject inventions. The Contractor also agrees to provide additional reports as may be requested by DOE in connection with any march-in proceedings undertaken by DOE in accordance with paragraph (j) of this clause. To the extent data or information supplied under this paragraph is considered by the Contractor, its licensee or assignee to be privileged and confidential and is so marked, DOE agrees that, to the extent permitted by law, it shall not disclose such information to persons outside the Government. The Contractor agrees to submit the annual reports for (10) ten years following the completion of the project period or until the patent is allowed to lapse or expire, whichever comes first. If sold or transferred, this reporting obligation will pass on to the buyer or transferee for completion of the ten-year period of time.