

## STATEMENT OF CONSIDERATIONS

REQUEST BY GE ENERGY AND ENVIRONMENTAL RESEARCH CORP. (hereinafter "GE") FOR WAIVER OF DOMESTIC AND FOREIGN PATENT RIGHTS IN AN IDENTIFIED INVENTION MADE UNDER DOE CONTRACT NO. DE-FC26-07NT42781 BETWEEN GE AND DOE, ENTITLED "UTILIZATION OF PARTIALLY GASIFIED COAL FOR MERCURY REMOVAL"; W(1)-2009-002; CH-1497.

The Petitioner, GE Energy (GE), a business division of GE Company, has requested a waiver of domestic and foreign patent rights in the following invention and related patents and patent applications.

S-117,851- "METHOD AND APPARATUS FOR UTILIZATION OF PARTIALLY GASIFIED COAL FOR MERCURY CONTROL"

The above-identified invention was made under DOE Contract DE-FC26-07NT42781. A patent for this invention issued on July 31, 2007, namely U.S. Patent No. 7,249,564. The purpose of this waiver is to vest Petitioner with clear title to the invention to enable Petitioner to continue development of the technology forming the subject matter of the invention and to commercialize such technology.

Referring to item 3 of the waiver petition, the overall objective of the contract under which the invention arose was to provide for pilot-scale proof-of-concept testing to demonstrate the viability of the concept involving sorbent via solid fuel gasification.

The DOE funding for the subject contract was \$124,000. The Petitioner provided \$12,000 or approximately 10% to develop the subject invention. No further or continuing government funding is expected.

Referring to items 5-7 of the waiver petition, GE is a recognized industry leader in combustion technology and in the control of mercury emissions from combustion source stack gases. GE has conducted numerous developmental and commercial projects involving the development and application of mercury control technologies. GE has numerous patents in the subject area. GE is actively engaged in establishing commercial mercury control projects with coal-fired utilities throughout North America. To this extent, GE has invested over \$1,000,000 in internal funding in the development of a series of mercury control technologies for coal-fired power plants.

In item 8 of the waiver petition, GE indicates that they plan to fully pursue commercialization of the subject invention to their utility customers. GE estimates that it will take 2 - 3 years to complete this commercialization project. GE and/or prospective licensees will expend the necessary capital and resources to commercially deploy the subject technology.

The grant of this waiver should effectively promote the continued development and commercial utilization of the subject invention since GE's efforts will encourage further development and commercialization of the subject invention. Specifically, GE will be involved in both the retrofitting of existing plants and in new product applications which will result in a more effective and cost effective means of controlling mercury emissions. These implementations will result in higher levels of mercury control as well as savings in operating costs. The waiver is necessary for development to proceed given the size and nature of the investment necessary to commercialize an invention of this type.

The Petitioner has agreed to accept the terms and conditions of the Large Business Confirmatory License, including the U.S. Government license, march-in and preference for U.S. industry provisions, as set out in 35 U.S.C. 202-204, as well as the U.S. Competitiveness provision. In brief, Petitioner has agreed that products embodying the waived invention or produced through the use of the waived invention will be manufactured substantially in the United States unless the Petitioner can show to the satisfaction of DOE that it is not commercially feasible to do so. The Petitioner has further agreed to make the above conditions binding on any assignee or licensee or any entity otherwise acquiring rights in the waived invention, including subsequent assignees and licensees. Should the Petitioner or other such entity receiving rights in the 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.

Referring to item 10 of the waiver petition, granting of this waiver will not have an adverse impact on the competition. There are multiple companies involved in this technology.

Considering the foregoing, it is believed that granting this waiver will provide the Petitioner with the necessary incentive to invest its resources in the commercialization of the waived invention, 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 748, all of which have been considered, it is recommended that the requested waiver be granted.

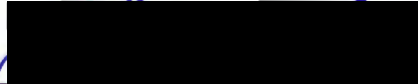
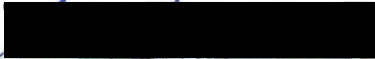
  
Assistant Chief Counsel Intellectual  
Property Law Division

Date: October 15, 2018

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 of extension of the contract, where through such modification or extension, the purpose, scope or cost of the contract has been substantially altered.

CONCURRENCE:

APPROVAL:



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Date: 11/9/18

Date: 12/5/18