

STATEMENT OF CONSIDERATIONS

REQUEST BY GENERAL ELECTRIC GLOBAL RESEARCH CENTER FOR AN ADVANCE WAIVER OF PATENT RIGHTS TO INVENTIONS MADE UNDER COOPERATIVE AGREEMENT DE-FC26-08NT05870

W(A)-2011-068 ; CH-1640

General Electric Global Research Center (GE-GRC) requests an advance waiver of domestic and foreign patent rights for all subject inventions made under the above cooperative agreement for work entitled, "Flexible Distributed Energy & Water from Waste for Food and Beverage Industry". The purpose of the cooperative agreement is the development of an online monitoring and supervisory control technology for treatment of food & beverage industrial wastewater through anaerobic digestion and/or aerobic bioprocess, to recover biogas and treated effluent water. The developed monitoring and control technology will include implementation of online sensors, use of dynamic model of the bioprocess for model-based estimation of un-measured variables, and supervisory control algorithms, to improve process robustness and operation efficiency. The technology will be developed in Phase I and will be demonstrated at a pilot test site in Phase 2 of the program. This waiver is for inventions of GE-GRC only.

The work under this subcontract is expected to take place from January 2009 through December 2012, at a total cost of \$3,000,000. GE-GRC will provide 37% cost share or \$1,100,000. DOE will provide the remaining 63% or \$1,900,000.

With respect to its technical competency in the field of automation and controls, in response to questions 4 and 5 of its waiver petition, GE-GRC states it has a strong and diverse expertise in modeling, advanced controls, optimization, signal processing, estimation and diagnostics, using advanced model-based techniques. GE Water is a leading provider of water treatment chemicals, equipment and sensing and monitoring solutions to broad industrial water applications. GE Intelligent Platforms is a global provider of software, hardware and services with expertise in automation and embedded computing, with a unique foundation of agile and reliable technology providing customers a sustainable advantage in the industries they serve, including energy, water, consumer packaged goods, military and aerospace, and telecommunications. GE has listed several patents and patent applications in support of its technical competency. GE-GRC has demonstrated its technical competency in the field of automation and controls.

In response to question 10 of its waiver petition, GE-GRC states that the effect on competition and market concentration is expected to be minimal as the work done on this project will provide specific monitoring controls solutions implemented with sensors available commercially within GE and outside GE. Other vendors already provide some solutions for wastewater plant controls and can further develop those solutions independently. Therefore grant of the waiver will have a positive 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 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

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.

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:

[Redacted signature area]

Mark P. Dvorscak
Deputy Chief Counsel
Intellectual Property Law Division

Date: February 8, 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:

[Redacted signature]

Bob Gemmer, EE-2F
Office of Advanced Manufacturing
Program, Energy Efficiency &
Renewable Energy

Date: 6/5/12

APPROVAL:

[Redacted signature]

John T. Lucas
Assistant General Counsel for
Technology Transfer and Intellectual
Property

Date: 6/6/2012

(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.