STATEMENT OF CONSIDERATIONS

REQUEST BY GENERAL ELECTRIC GLOBAL RESEARCH FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN INVENTION RIGHTS UNDER DOE CONTRACT NO. DE-FE0000784; W(A)-2010-03, CH-1542

The Petitioner, General Electric Global Research (GE) was awarded this cooperative agreement for the performance of work entitled, "Cost Effective Recovery Of Low-TDS Frac Flowback Water For Re-Use." According to its response to question 2, GE states that it will develop a process to treat shale gas frac flowback water to 1) reduce the net amount of fresh water used in the production of natural gas from gas shale, and 2) reduce the amount of wastewater. The program will evaluate membrane-based methods for treating a portion of the frac flowback water to recover water that is re-usable for frac operations. Key aspects are 1) evaluation of pretreatment methods to remove biological and other suspended matter, dissolved organics, and other contaminants that could potentially foul the membranes, and 20 evaluation of desalination membrane processes. The overall water treatment process will be evaluated to determine its performance, cost, and mobility. GE states that this project will be executed in close cooperation with another project at GE GRC funded by DOE, DE-AC26-07NT42677—Research Partnership to Secure Energy for America (RPSEA). The RPSEA project is the subject of Class Wavier No. W(C) 07-002; GE is a subawardee under the 42677 award and is eligible to participate in the class waiver. The subject waiver is only for inventions of GE made under the subject cooperative agreement.

The total estimated cost of the contract is $976,055 with GE providing a 20% cost-share or $195,211. DOE is providing the remaining 80% share of $976,055. The period of performance is from August 1, 2009 through July 31, 2011.

In its response to questions 5 and 6 of the attached waiver petition, GE has described its technical competence in the field of water and water process technologies. GE states it offers a wide product portfolio of chemicals used for membrane-water pretreatment and corrosion prevention. It has corporate divisions that provide microfiltration, ultrafiltration, membrane bioreactors for treating various municipal and industrial waste waters. Other corporate division offer desalination membrane products that have been commercially used for desalination of waters from a variety of sources. GE states it has also developed chemically stable, and chlorine tolerant RO (reverse osmosis) and NF (nanofiltration) membrane products. GE's response demonstrates its technical competency in the field of water and water treatment technologies.

In its response to question 10 of the attached waiver petition, GE states that grant of the waiver will not have an adverse effect on competition. There are significant competitive technologies and competitors in the field of frac flowback water treatment for reuse, particularly reverse osmosis, nanofiltration, and biological methods and thermal distillation. Therefore grant of the waiver will have a positive effect on competition and market concentration.

The subject contract will be modified to add the Patent Rights–Waiver clause in conformance with 10 CFR 784.12, wherein GE has agreed to the provisions of 35 U.S.C §§ 202, 203, and 204. This waiver clause will also include a paragraph entitled U.S. Competitiveness, in which GE agrees to substantial U.S. manufacture of subject inventions (attached hereto). Additionally, GE agrees not to transfer subject inventions to any other entity unless that other entity agrees to these same requirements.

Considering the foregoing, it is believed that granting the waiver will provide the Petitioner with the necessary incentive to invest resources in the commercialization of the results of the agreement in a fashion which will make the agreement's benefits available to the public in the shortest practicable time. In addition, it would appear that grant of the above requested waiver would not result in an adverse effect on competition nor result in excessive market concentration. Therefore, 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, as set forth above, be granted.

[redacted]

Mark P. Dvorscak
Deputy Chief Counsel
Office of Intellectual Property Law

Date Jan. 12, 2010

Based on the foregoing Statement of Considerations and the representations in the attached waiver petition, it is determined that the United States and the general public will best be served by a waiver of rights of the scope described above, and therefore the waiver is granted. This waiver shall not apply to any modification or extension of this agreement, where through such modification or extension, the purpose, scope, or cost of the agreement is substantially altered.

CONCURRENCE:

[redacted]

Guido [redacted] DeHoratiis
Office of ~~Sequestration, Hydrogen And Clean Coal Fuels~~ Oil and Gas
Office of Fossil Energy, FE-[redacted] 32

Date 3/10/10

APPROVAL:

[redacted]

Paul A. Gottlieb
Assistant General Counsel for
Technology Transfer and
Intellectual Property, GC-62

Date 3-12-10

(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.