STATEMENT OF CONSIDERATIONS

Request by Siemens Energy, Inc. for an Advance Waiver of Domestic and Foreign Invention Rights under DOE Contract No. DE-FE0003714, W(A) 2011-032, CH-1614

The Petitioner, Siemens Energy, Inc. (Siemens) was awarded the subject cooperative agreement with DOE for the performance of work entitled, "Recovery Act: Slipstream Development and Testing of Siemens Post Cap™ Capture and Separation Technology". The goal of this project is to engineer, install, and operate an advanced post-combustion solvent-based pilot plant that has significant potential to provide an efficient, low-cost CO2 capture solution for both industrial and fossil-fuel power plant applications. The Siemens Post Cap™ capture process utilizes an amino acid salt solvent that offers cost and performance advantages compared to state-of-the-art aminebased solvents. The pilot plant will treat flue gas slip stream equivalent to approximately 2.5 MW. Although the CO2 source for this slip stream pilot-scale testing is from coal-fired power plant flue gas, it will provide a useful design and performance baseline for direct scale-up to many industrial applications that produce a dilute flue gas stream, such as petroleum refining, steel manufacturing, and industrial boilers. The pilot-scale testing provides the necessary design and performance data to enable the next step of process development for larger power plant applications. The waiver will apply to Siemens employees and it subcontractor employees, except for inventions made by subcontractors eligible to retain title to inventions pursuant to P.L. 96-517, and National Laboratories.

The work under this agreement is expected to take place from October 1, 2010 through October 31, 2013. The total amount of the contract is \$18,750,000, with DOE providing \$15,000,000 or 80%. Siemens is providing the remaining 20% cost share or \$3,750,000.

In its response to questions 5 and 6 of the attached waiver petition Siemens has described its technical competence in the field of CO₂ capture, including bench-scale laboratory work, computer simulations, and building/operating pilot plants for a variety of technologies. Siemens has provided a list of its relevant worldwide patents in this area. Siemens also states that it has successfully demonstrated the effectiveness of its solvent technology in Europe with corporate partners up to a 100 kW pilot plant size. Its Post Cap™ process offers significant environmental advantages when compared to other solvent based systems that make it highly compelling in the carbon capture market. Siemens' response demonstrates its technical competency in the field of CO₂ capture.

In its response to question 10 of the attached waiver petition, Siemens states that granting the waiver will not place it in a preferred position in this field. Siemens also states that it competes with other global companies that have the potential to develop solvent based post-combustion carbon capture technologies. Grant of the waiver will not preclude from Siemns' competitors from competing in exactly the same subject area represented by this agreement. 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 Siemens 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 Siemens agrees to substantial U.S. manufacture of subject inventions (attached hereto). Additionally, Siemens agrees not to transfer subject inventions to any other entity unless that other entity agrees to these same requirements. The Contractor agrees to submit copies of issued U.S. Patents resulting from waived inventions, and to submit annual reports on

the utilization of a waived invention or on efforts at obtaining such utilization that are being made by the Contractor or any of its licensees or assignees

In view of the cost sharing and other equities between Siemens 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 Siemens' 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 Siemens 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 Siemens' 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 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.



Mark P. Dvorscak Deputy Chief Counsel

Office of Intellectual Property Law

Date: May 3, 2011

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, 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:

Division of Carbon Capture and S

Division of Carbon Capture and Storage Research Office of Fossil Energy APPROVAL:

for Technology Transfer and Intellectual Property

(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.