

STATEMENT OF CONSIDERATIONS

Request by Siemens Westinghouse Power Corporation for an Advance Waiver of Domestic and Foreign Invention Rights under DOE Cooperative Agreement No. DE-FC26-05NT42646, W(A)-05-055; CH-1342

The Petitioner, Siemens Westinghouse Power Corporation, (Siemens) was awarded this cooperative agreement for the performance of work entitled, "Zero Emissions Coal Syngas-Oxygen Turbo Machinery." The purpose of the cooperative agreement is the research and development of turbines and related systems to utilize high hydrogen fuels derived from coal. The program envisioned the development of a turbine for an Oxy-fuel Rankine Cycle System that would be integrated into a highly efficient, near zero emission power plant. The potential impact of this program opens up a new power generation technology for the future to secure that the U.S. electric power production is clean, efficient, affordable and fuel-flexible. Combustion with oxygen syngas makes possible the continued use of coal with capture of CO₂ and all of the Clear Air Act criteria pollutants. A detailed description of the project is provided in response to questions 1 and 2 of the attached waiver petition. This waiver is for inventions of Siemens only under the cooperative agreement¹.

The total estimated cost of the cooperative agreement is \$21,815,822, with the DOE share being \$15,701,509, or 72%, while the remaining cost share of 28%, or \$6,114,313, will be provided by Siemens. The period of performance is from October 2005 through September 2010.

In its response to questions 4 and 5 of the attached waiver petition, Siemens has described its technical competence in the field of gas turbine engines and steam turbine power plants. It is a global leader in the design of these facilities and today has over 324 GW of installed steam turbine power generation worldwide. Siemens' technical expertise ranges from mechanical design, computations fluid dynamics, thermal acoustics, combustion kinetics, finite element and probabilistic analysis, material systems and testing. A representative listing of patents issued in the United States, for turbine systems and components, is attached to the waiver petition as Attachment 1. Siemens' response demonstrates its technical competency in the field of gas turbines and steam turbine power plants.

In its response to questions 8 and 9 of the attached waiver petition, Siemens states that grant of the waiver request will provide Siemens with the incentive to develop this high risk advanced steam turbine system and thus improve the performance and reliability requirements of advanced steam turbines. Siemens states that the inventions for which a waiver is sought are but a component part of a subject area that is only a portion of the global power plant market. All other forms of generating electrical power, such as steam turbine technology, nuclear power, hydroelectric and wind facilities, represent competition to the global power plant market. Thus grant of the waiver will not place Siemens in a preferred position: it will allow it to remain competitive in a global marketplace, and therefore have a positive effect on competition and market concentration.

The subject cooperative agreement 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

¹ Please see attached e-mail from Siemens indicating that it has deleted its request for title to subcontractor inventions under the agreement.

(attached hereto). Additionally, Siemens 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 signature block]

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

Date: April 19, 2006

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 signature block]

Samuel Biondo
Office of Clean Energy Systems
Office of Fossil Energy, FE-22

Date: 5/11/06

APPROVAL:

[Redacted signature block]

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

Date: 5-15-06

(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.

WAIVER ACTION - ABSTRACT

W(A)-05-055 (CH-1342)

REQUESTOR

CONTRACT SCOPE OF WORK

RATIONALE FOR DECISION

DISPOSITION

Siemens Westinghouse
Power Corporation
Under Cooperative Agreement
No. DE-FC26-05NT42646

Zero Emissions Coal Syngas-Oxygen
Turbo Machinery

28% cost sharing