

STATEMENT OF CONSIDERATIONS

REQUEST BY FOSTER WHEELER, FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN INVENTION RIGHTS DOE COOPERATIVE AGREEMENT NO. DE-FC26-03NT41865; W(A)-03-052, CH1169

The Petitioner, Foster Wheeler (FW), was awarded this cooperative agreement for the performance of work entitled, "Ammonia-Free NO_x Control System." The purpose of the cooperative agreement is to achieve very low levels of NO_x emissions from pulverized coal fired boiler systems by employing a novel system level integration between the PC combustion process and flue gas NO_x reduction. Catalyst formulations successful in the automotive applications will be evaluated both analytically and empirically for their use in PC power plants. This knowledge, combined with prior catalyst research for power plant applications conducted at Lehigh University, will allow the research team to identify and test catalyst formulations robust enough for power plant flue gas environments. A PC combustion study, along with an evaluation of a conceptual 400 Mwe, coal fired PC boiler systems will also be conducted. The waiver is for inventions of Foster Wheeler only, since P.L. 96-517 applies to inventions made by FW's subcontractor Lehigh University.

The total estimated cost of the cooperative agreement is \$470,091 with the DOE share being \$376,073 or 80%, while the remaining cost share of 20%, or \$94,018, will be provided by Foster Wheeler. The period of performance is from October 1, 2003 to September 30, 2004.

In its response to questions 5 and 6 of the attached waiver petition, Foster Wheeler has described its technical competence and commercial position in the field of utility boilers. Foster Wheeler is the leading manufacturer in the global utility market, and has more than a century of experience in design, fabrication, construction and commissioning of boiler equipment. FW's PC furnaces are designed for efficient combustion of solid, liquid or gaseous fuels, assuring proper gas temperatures entering the convection pass. FW offers a complete line of NO_x control products for power plants, and has developed three generations of low NO_x burners. FW is a leader in selective catalytic reduction (SCR) technology, its designs have an outstanding record of reliability, easy operation and low maintenance. FW also states that its subcontractor, Lehigh University, has been assisting the utility industry to improve power plant performance for more than thirty years. FW's response demonstrates its technical competency in the field of utility boilers.

In its response to questions 9 and 10 of the attached waiver petition, FW states that grant of the waiver will help in the commercialization of the technology in the U.S. utility markets and allow it to apply the technology on future projects. The effect on market concentration is expected to be minimal. The main objective of the project is to demonstrate very low NO_x emissions from a coal-fired boiler by integrating low NO_x combustion technology and downstream NO_x controls. Other technology exists from utility NO_x control, such as SCR and selective nitrogen catalytic recovery (SNCR), various combustion fuel/air management techniques, as well as low temperature NO_x removal processes in various stages of development. The availability of alternate technical approaches will prevent significant market concentration. Therefore grant of the waiver will 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 FW 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 FW agrees to substantial U. S. manufacture of subject inventions (attached hereto). Additionally, FW agrees not to transfer subject inventions to any other entity unless that other entity agrees to these same requirements. The petitioner has further agreed to modification of the data clause of the subject cooperative agreement (48 C.F.R. 952.227-14) by adding paragraph (k), Alternative VI, concerning contractor licensing of data.

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
Assistant Chief Counsel
Intellectual Property Law Division

Date: Dec. 29, 2003

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.

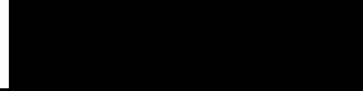
CONCURRENCE:



George Rudins
Deputy Assistant Secretary
Office of Fossil Energy
Coal and Power Systems
FE-20/FORS

Date: Feb 17, 2004

APPROVAL:



Paul A. Gottlieb
Assistant General Counsel
for Technology Transfer and
Intellectual Property

Date: 2-19-04

(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 Cooperative 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 Cooperative 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 Cooperative 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.