

## STATEMENT OF CONSIDERATIONS

Request by McDermott Technology, Inc. for an Advance Waiver of Domestic and Foreign Invention Rights under DOE Cooperative agreement No. DE-FC26-98FT40007; W(A)-98-023, CH-0992

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The Petitioner, McDermott Technology, Inc. (McDermott), was awarded this cooperative agreement for the performance of work entitled "Fine Particulate Characterization and Control for Coal-Fired Boilers". McDermott is a subsidiary of McDermott International. McDermott International, although owned by a Panamanian concern, is considered a U.S. company because the Panamanian concern is controlled by United States citizens. The objective of this project is to demonstrate technologies at pilot scale that reduce NO<sub>x</sub> and PM<sub>2.5</sub> emissions, mitigating any deleterious effects on public health or the environment, while keeping coal both economically and environmentally competitive as an electric utility boiler fuel. The objective will be achieved through three efforts: a) development and testing of an ultra low NO<sub>x</sub> pulverized coal (PC) burner for plug-in retrofit applications without boiler wall tube modifications; b) assessing the impact of low-NO<sub>x</sub> PC burner operation on NO<sub>x</sub> and PM<sub>2.5</sub> control; and, c) providing high-quality data to ensure that the potential PM<sub>2.5</sub> regulations are based on good scientific information. Further details for fulfilling these objectives are described in the McDermott's response to question 2 of the attached waiver petition. McDermott has requested a waiver of domestic and foreign rights for all subject inventions under this cooperative agreement with DOE.

The total estimated cost of the cooperative agreement is about \$2,100,000. Cost sharing of the project includes McDermott's cost share of about \$400,000; Ohio Coal Development Office's (OCDO) share of about \$700,000, and DOE's cost share of \$500,000. The contribution from the OCDO is under a separate agreement with the petitioner, under which there is no provision concerning intellectual property ownership. McDermott also has an in-kind contribution cost share of about \$500,000, for a total cost share of \$900,000, or 42%. The period of performance of the cooperative agreement is from September 30, 1998 through September 30, 1999.


In its response to questions 5 and 6 of the attached waiver petition, McDermott has shown significant technical competence in developing technologies that further advance the art and science of power generation with effective control of environmental emissions. Through its 130 year history through its affiliate, Babcock & Wilcox (B&W), McDermott has developed innovative combustion and environmental control technologies and products for both the new and retrofit utility boiler markets. Babcock & Wilcox is also a subsidiary of McDermott International. B&W has numerous patents and has published many technical papers on burner and emission control equipment and processes. Recent B&W and McDermott burner environmental control patents, as well as related papers and presentations, are listed in response to question 5 of the attached waiver petition. This background will be used to develop the combustion and emission control systems under the subject cooperative agreement. These publications, along with an information booklet entitled "Combustion and Environmental Control Technologies", are attached to McDermott's waiver petition.

From its response to question 10, McDermott indicates that there would be no effect on competition and market concentration by grant of the waiver because of differences in design approaches by competing manufacturers which will likely stimulate competition nor place any manufacturer in a predominant competitive position.

The Petitioner has agreed to the standard provisions with respect to invention waivers with the substitution of the march in rights, U.S. manufacturing preference and U.S. government license provided in 35 U.S.C. 202-204. Additionally, McDermott has accepted standard background patent and data provisions of paragraph (k) to assure commercialization of the technology.

The subject cooperative agreement will be modified to add the Patent Rights--Waiver clause in conformance with 10 CFR 784.12. This waiver clause will also include a paragraph entitled U.S. Competitiveness, attached hereto, in which McDermott agrees to substantial U. S. manufacture of the subject inventions. Additionally, McDermott agrees not to transfer the subject inventions to any other entity unless that other entity agrees to these same requirements.

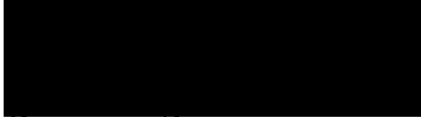
Considering the foregoing, it is believed that granting the waiver will provide the Petitioner with the necessary incentive to invest resources in the commercialization of the results of the agreement in a fashion which will make the agreement's benefits available to the public in the shortest practicable 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.

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

Date July 14, 1999

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 and consent to assignment 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 for  
Coal Technology

Date 1/26/01

APPROVAL:



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

Date 1-29-01

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.