

## **STATEMENT OF CONSIDERATIONS**

**REQUEST BY CONSOLIDATION COAL CO. (CONSOL) FOR AN  
ADVANCE WAIVER OF DOMESTIC AND FOREIGN INVENTION  
RIGHTS UNDER COOPERATIVE AGREEMENT NO. DE-FC22-92PC-  
92642, W(A)-93-018, CH-0775**

New York State Electric & Gas Co. (NYSEG) was awarded this cooperative agreement under the fourth round of the Innovative Clean Coal Technology Program pursuant to P.L. 101-512 to demonstrate a combination of cost effective emission reduction and efficiency improvement technologies which will allow utilities to comply with the Clean Air Act Amendments of 1990, at the Milliken Station in Lansing, New York. The cooperative agreement resulted from NYSEG's proposal submitted in response to a PON from DOE. Of the thirty-three proposals submitted under the PON, nine were selected for DOE funding.

Consolidated Coal Company (Consol) is a large business subcontractor of NYSEG and will provide technical support services including the characterization of physical and chemical properties of potential waste streams, by-product marketing support, supplemental monitoring activities, start-up and shakedown support, and S-H-U, NOxOUT, and waste heat recovery process evaluations. Consol will conduct field evaluations to determine the impact of the Milliken demonstration on trace element emissions and greenhouse gas emissions. As indicated in response to question 1 of the attached waiver petition, Consol has agreed that NYSEG shall have a non-exclusive irrevocable royalty free license to use subject inventions in the operations of its business. In addition, the cofunders of the project, EPRI, ESEERCO and NYSERDA shall have the right to obtain a nonexclusive, irrevocable, royalty free license to use or permit others to use subject inventions in the performance of projects. This approach should focus development and ultimate commercialization of this technology as well as simplify administration of the recoupment provisions of the cooperative agreement required by P.L. 98-146.


The total estimated cost of the cooperative agreement is about \$158,607,807 with NYSEG and its subcontractors cost sharing 72 percent of the total agreement cost. The total estimated cost of this subcontract is \$4.8 million, with Consol contributing \$2 million toward project costs, along with the provision of key employees with expertise and experience in flue gas desulfurization systems. Moreover, as noted above, Consol will be required to provide a plan for cost recoupment including royalty sharing with the government, which is subject to approval by the contracting officer. Therefore, the grant of this waiver will facilitate NYSEG's and Consol's efforts to meet its recoupment obligations under the cooperative agreement with respect to royalty revenue from licensing of the technology.

Consol is technically competent in the field of flue gas desulfurization. Consol has developed the CONOSOX™ and the Coolside processes to control SO<sub>2</sub> emissions from power plants, and evaluated different pollution control devices including the first application of spray dryer technology to high-sulfur coal, electrostatic precipitator performance evaluations, and NO<sub>x</sub> emissions at coal-fired power stations. A list of numerous relevant patents and publications by Consol in this field is attached to its waiver petition.

In addition to its direct cost sharing, according to its response to questions 7 and 8, Consol has invested in background research relevant to the subcontract technology. This investment has been about \$12 million, including \$2.5 million as a cost share for the Edgewater demonstration of the Coolside process under Clean Coal I. Consol intends further investment in the technology along with the promotion of the commercial utilization of any invention. This private investment clearly demonstrates Consol's commitment to the technology and indicates a likelihood of an effort to commercialize the results of the subcontract.

Consol 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, Consol has accepted standard background patent and data provisions of paragraphs (k), (h) and (j) to assure commercialization of the technology, and has agreed to a special provision allowing the government to complete the project in the event Consol is incapable of completing the subcontract.

Considering the foregoing, it is believed that granting the waiver will provide Consol with the necessary incentive to invest its resources in the commercialization of the results of the subcontract in a fashion which will make the subcontract's benefits available to the public in the shortest practicable time. Therefore, in view of the objectives and considerations set forth in 41 CFR 9-9.109-6, all of which have been considered, it is recommended that the requested waiver be granted.

  
\_\_\_\_\_  
Mark P. Dvorscak  
Patent Attorney  
Intellectual Property Law Division

Date 12/20/93

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

CONCURRENCE:

APPROVAL:



Jack S. Siegel  
Acting Assistant Secretary  
for Fossil Energy

Date 2/1/94



Richard E. Constant  
Assistant General Counsel  
for Intellectual Property, HQ

Date 2/10/94