

**ANNUAL PROJECT REPORT  
AS OF DECEMBER 1988**

**1. PROJECT SPONSOR:**

PEI ASSOCIATES, INC.  
11499 Chester Road  
Cincinnati, Ohio 45246

**2. PROJECT MANAGER:**

M. F. Szabo

**TELEPHONE:** (513) 782-4700

**3. OCDO GRANT NO#:** 10-86-038

**4. PROJECT:** Final Report

**5. PROJECT TITLE:** Evaluation of Acid Rain Control Studies for Ohio Electric Utility Coal-Fired Power Plants

**6. PROJECT TERM:** FROM June 1, 1986 TO December 31, 1988

<b>7. PROJECT</b>	<b><u>NAME</u></b>	<b><u>COST-SHARE</u></b>
<b>CO-SPONSORS:</b>	OCDO	\$ 42,000.00
	U.S. EPA/AEERL	55,000.00
	U.S. EPA/RO-V	50,000.00
	U.S. EPA/AEERL	<u>25,000.00</u>
<b>TOTAL PROJECT COST:</b>		\$172,000.00

**I. ABSTRACT**

**8. OBJECTIVES**

The objective of this research is to develop and apply an environmental performance/cost assessment model for emerging and commercial environmental control technologies as applied to Ohio coal-fired utility units. Specific elements include an expanded database on Ohio coal-fired utility units, an integrated air pollution control systems model, performance/cost assessments of various technologies for specific stations and based thereon, implications for OCDO's clean coal technology program.

**9. WORK DONE AND CONCLUSIONS:**

Two reports of work associated with the research program were released during the reporting period. They are the project and topical reports entitled, "Evaluation of Acid Rain Controls for Ohio Electric Utility Coal-Fired Power Plants." Two computer software products associated with the

research program were released. They are "Coalbase" -- a Database of coal fired utility boilers in the United States and IAPCS -- the Integrated Air Pollution Control System Performance and cost-estimating model.

#### **10. PLANS FOR COMING YEAR:**

A more "user friendly" version of IAPCS will be released following review and comment by EPA.

### **II. HIGHLIGHTS/ACCOMPLISHMENTS**

11. Two report products and two computer software products were released, completing all project deliverables.

### **III. ARTICLES/PRESENTATIONS**

12. At the recent FGD/LIMB symposium (October 1988), a paper was presented by PEI describing the use of a computerized data base and model in generating retrofit cost estimates (N.B., these software products were given to OCDO).