

7.27 Assessment of NO_x and Combined SO_x/NO_x Control by FGT Technology

Objective: Provide an informed basis to evaluate FGT technology for 70-90% control of NO_x and SO_x emissions from stationary combustion sources.

Approach: Through technical and economic evaluations of post-combustion NO_x and combined SO_x/NO_x processes, the viability of the technology will be assessed. Emphasis will be placed on results from the pilot plant testing in the U.S. and on results from commercially operating, full-scale units in Japan. In parallel with these technical assessment activities, economic studies to determine the cost of applying the technology to coal-fired utility boilers in the U.S. will be undertaken. These technical and economic assessment activities will enable industry, vendor, and regulatory personnel to determine the cost effectiveness and feasibility of utilizing FGT technology for highly efficient (70-90%) control of NO_x and SO_x emissions.

Rationale: There are a number of environmental issues--such as acid rain, prevention of significant deterioration (PSD), non-attainment, visibility, NSPS, and the short-term NAAQS--confronting both industry and government which may require consideration of highly efficient control of NO_x and SO_x emissions. The only technology currently available to achieve 70-90% removal efficiencies is FGT technology. Therefore, an informed basis must be developed to enable an appropriate evaluation of the cost effectiveness of the technology.

Resources (\$1000's):

FY81	FY82	FY83
3	131.2	0

Milestones:

- ° Complete report on the Pilot Plant Evaluation of the Hitachi-Zosen NO_x FGT Process; 2/82
- ° Complete report on the Independent Evaluation of the Hitachi-Zosen NO_x FGT Process; 2/82