



PROJECT DESCRIPTION

- In this project GE EER will develop a new Summary mercury control technology in which sorbent for mercury removal is produced from coal in a gasification process in-situ at coal burning plant.
- The main objective of this project is to Objective obtained technical information necessary for moving the technology from pilot-scale testing to a full-scale demonstration.
- Goal of the program is to achieve at least 70% **Technical** mercury removal above baseline at 25% or Goal less of the cost of activated carbon injection.



We introduced Work Utilization of Partially Gasified Coal for Mercury Removal **GE Environmental Services**

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3 **PILOT-SCALE DATA**



Optimization of gasifier conditions improves sorbent reactivity

partially gasified coal is at least 80% less than ACI

5 **PILOT-SCALE PROCESS OPTIMIZATION**

- Boiler Simulator Facility (1x10⁶ Btu/hr)
- Solid fuel gasifier (90,000 Btu/hr)







PROJECT SCHEDULE

TASK	TASK		DUR			
No.	NAME	2006	2007			
		Q4	Q1	Q2	Q3	
			Project Initiation			
1	Preparation of Experimental Facilities		-			
2	Optimization of Gasification Process		1			,
3	Optimization of Mercury Removal					
4	Process Design and Economic Analysis					
5	Management and Reporting		•			
	MILESTONES					
1	Optimization of the gasification process and selection of sorbents for Hg testing					
2	Demonstartion of 70% Hg removal					



