

**PUBLIC ABSTRACT**

Applicant (primary) name: Robinson Run Power, LLC

Applicant-s address: 1040 Great Plain Avenue, Needham, MA 02492-2517  
Street City State Zipcode

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Team Members (if any): T. W. Wheble, Robinson Run, Needham, MA 02492  
(listing represents only participants Name City State Zipcode  
at time of application, not necessarily  
final team membership)

M. Dugan, Robinson Run, Frederick, MD 21703  
Name City State Zipcode

Will Goss, McMurray, PA 15317  
Name City State Zipcode

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Proposal Title: Dry Absorption Process (DAP)

Commercial Application:  New Facilities  Existing Facilities

**9** Other, Specify: \_\_\_\_\_

Technology Type: Emission Control – Coal-Fired Power Plants

Estimated total cost of project:  
(May not represent final negotiated costs.)

Total Estimated Cost: \$ 24,300,000

Estimated DOE Share: \$ 12,000,000

Estimated Private Share: \$ 12,300,000



Neehman, MA 02492

City

State

Zipcode

## **PUBLIC ABSTRACT (cont=d)**

### **Brief description of project:**

#### **Dry Absorption Process Demonstration Robinson Run Power Plant**

This Clean Coal Project demonstrates an emerging multipollutant control technology that will target reduction of sulfuric acid mist ( $H_2SO_4$ ) and mercury, and potentially other heavy metals in a single process. The project will be demonstrated at Robinson Run Power, a 600 MW clean coal power plant currently under development. Robinson Run Power will have a stringent limit for  $NO_x$  emissions that will be achieved through the use of an SCR system. Operation of an SCR system downstream of a boiler firing high sulfur coal will increase the formation of  $SO_3$ . The current boiler flue gas emission control technology uses a wet ESP for acid mist removal and relies on the particulate control device for removal of metals or to inject an expensive activated carbon sorbent. This project treats the boiler exhaust gas with a lime-based sorbent in a dry absorption process (DAP) reactor to facilitate removal of hazardous air pollutants in a downstream conventional fabric filter baghouse. This process eliminates the need for a wet ESP. This project provides a unique opportunity to collect large-scale, long-term operational data on the effects of mercury and acid gas collection efficiencies.

