

**PUBLIC ABSTRACT**

Applicant (primary) name: Western Greenbrier Co-Generation , LLC

Applicant-s address: 125 Alta Mountain Road, Lewisburg, WV 24901  
Street City State Zipcode

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Team Members (if any): Parsons E&C, Reading, PA 19607  
(listing represents only participants Name City State Zipcode  
at time of application, not necessarily  
final team membership)

Alstom Power, Inc., Windsor, CT 06095  
Name City State Zipcode

Hazen Research, Inc., Golden, CO 80403  
Name City State Zipcode

(Use continuation sheet if needed.)

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Proposal Title: Western Greenbrier Co-Production Demonstration Project

Commercial Application: XX New Facilities 9 Existing Facilities

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

Technology Type: Clean Coal Co-Production Power Plant

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

Total Estimated Cost: \$ 215,000,000

Estimated DOE Share: \$ 107,500,000

Estimated Private Share: \$ 107,500,000



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City

State

Zipcode

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

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

Western Greenbrier Co-Generation, LLC (WGC) proposes to construct a 75 MW clean-coal, co-production demonstration project in Rainelle, West Virginia. The primary fuel will be waste coal from a 4 million ton refuse site in Anjean, West Virginia. Parsons E&C (Reading, Pennsylvania) will be the turn-key systems contractor with Alstom Power (Windsor, Connecticut) providing an advanced fluidized-bed boiler system. The integrated co-production facility will manufacture structural bricks certified to meet insulation and load-bearing specification requirements while simultaneously providing 75 MW of power to the national grid. Ash chemical properties will be tightly controlled using a process developed by Hazen Research Labs in Golden, Colorado. The patented structural bricks, which contain both ash and wood waste (trademarked “WoodBriks™.”), were developed by Midway Environmental Associates of Arvada, Colorado.

The power plant will be the “anchor tenant” in a new, environmentally balanced industrial park (an ECO-Park), which builds on a synergistic relationship to the clean-coal power generation system. The ECO-Park will include greenhouse structures for hot water utilization, the WoodBrik™. co-production facility for ash utilization, and a variety of steam users including a hardwood dry kiln.

Western Greenbrier Co-Generation, LLC is a new public service entity formed to serve the interests of three municipalities (Rainelle, Rupert, and Quinwood) in Greenbrier County, West Virginia.