Submitted by: EERC
Principal Investigator: Jason Laumb
Project Duration: 10 months
Total Project Costs: $693,100
Request for: $325,000

Summary of Project
Funds for this project will be used to:

- Characterize the raw syngas composition from entrained-flow gasification of a variety of coal–biomass combinations,
- Define the requirements for the appropriate cleanup system(s), and
- Define operating parameters.

The tests will be conducted with blends of coal and corn stover, straw, wood, and switchgrass. Blends from 30% to 100% biomass will be considered.

GE-GR (GE Global Research) is collaborating with EERC on this project and providing $34,000 cash match. The remaining match comes from DOE.

The project will provide data that is critical to vendors of Entrained Flow Gasifiers, such as GE, in order to move forward with projects. These larger-scale renewable projects could utilize ND renewable and coal resources. These projects could also lead to greater utilization of the biomass with higher carbon conversion, lower tar production.

The scope of work includes:

- System modifications to feed biomass.
- Gasification of coal–biomass blends.
- Analysis of gasification products.

Independent Technical Reviewers' Recommendations
2 – Fund, 1 – Funding May Be Considered

Technical Advisor's Recommendation
Funding May Be Considered

Conflicts of Interest
None

Vote
3 – Yes, 2 – No