

Biomass Cofiring: A Renewable Alternative for Utilities



Objective: To develop small modular biopower systems

- fuel flexible
- efficient
- simple to operate
- minimum negative impacts on the environment
- power range: 5 kW-5 MW

Individual Households to Institutions (hospitals, schools) under 100 kW

<u>Developer</u>	<u>Location</u>	<u>Technology</u>
• Sunpower	OH	Gasification/Stirling Engine
• CPC	CO	Gasification/IC Engine
• STM	MI	Gasification/Stirling Engine
• Reflective Energies	CA	Gasification/Gas Turbine

Multiphase Project

- Phase 1: Feasibility Studies
- Phase 2: Prototype Development and Testing
- Phase 3: Integrated Systems Demonstration

Small Villages and Industries 100-300 kW

<u>Developer</u>	<u>Location</u>	<u>Technology</u>
• Reflective Energies	CA	Gasification/Gas Turbine
• Bechtel	VA	Gasifier/Engines/ Gas Turbine

Milestones

Phase I RFQ	Feb 1998
Phase I awards	May-Jun 1998
Phase II RFQ	Jul 1998
Phase II selection	In Progress

Industries, Mini-grids, Grid Support > 500 kW

<u>Developer</u>	<u>Location</u>	<u>Technology</u>
• Agrielectric	LA	Fluid-Bed Combustor/ Steam Turbine
• Bioten	TN	Direct-Fired Comb. Turbine
• Carbona Corp	GA	Gasification/ Steam Turbine
• EERC	ND	Fluid-Bed Combustor/ Steam Turbine
• Niagara Mohawk	NY	Gasification/IC Engine/ Gas Turbine

For More Information. Visit the BioPower Web site at: <http://www.eren.doe.gov/biopower>



STM's BioStirling™ system is one example of the modular power units being developed under this initiative.



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