

(6) Field Trial of a High Capacity Gas-Fired Paper Dryer

This project builds on a pilot scale dryer project funded by the U.S. Department of Energy. From the results of that project, a preliminary and final design will be completed, a gas-fired system constructed and a field trial conducted.

Total project cost: \$1,424,850

Funding request: \$634,850

Project Lead: Minnesota Department of Commerce, State Energy Office Project

Participants: Western Michigan University; Gas Technology Institute; Boise Paper Solutions; Groupe Laperriere & Verreault; Flynn Burner, Corp.

Patents

None.

Presentations/Publications

The presentation titled "Advanced Gas-Fired Drum Drying Technology Improves the Papermaking Efficiency" by Y.Chudnovsky, J.DiGiacomo. was made at 2006 TAPPI PLACE Conference, Cincinnati, OH, September 2006.

Progress in Past Quarter and Current Status

<u>Milestones:</u>	<u>Date</u>	<u>Status</u>
Draft full-scale GFPD design developed	12/31/04	done
Final GFPD design completed	06/30/05	done
Baseline test/auditing completed	12/31/05	done
GO/NO GO (contract modification approved by STAC)	09/27/06	done
<u>The following dates were revised per approved contract modification:</u>		
GFPD components fabricated, purchased, assembled	04/30/07	
Data collection completed	05/31/07	
Final Technical Report	06/30/07	

The following activities were performed during the reported period:

The Technical Advisory Group (TAG) was formed with the main purpose to provide technical guidance and industrial insight to the project findings as well as future commercialization support. The TAG comprises of the leading experts in papermaking with emphasis to paper drying:

- Liberty Paper Inc., an LDI Company (L.Newell, General Manager)
- Enbridge Gas (A.Zaidi, Chair of ESC Paper Drying Consortium)
- CleanTech Partners (B.English, fmr USDA Forest Services and B.Thorp, rtd VP Georgia Pacific Corp.)
- GL&V USA Inc (F.Elbert, Product Manager - Drying Systems)
- Flynn Burner Corporation (J.Pezzuto, Engineering Manager - Combustion Systems and Controls)

During the reported quarter GTI has also performed multiple communications with project partners, papermakers and gas companies to further support the GFPD development and technology showcase

Plans for Next Quarter

- Execute project time extension to June 30, 2006

- Adjust GFPD design for the full-scale laboratory trial
- Modify existing subcontracts with GL&V and FBC
- Develop a control/measurement system for laboratory installation
- Initiate GFPD fabrication