

(24) Motor Control and Power Conversion Technologies Using FLEXMOD

The key objective of this 18-month program is to develop a flexible, universal, modular inverter platform that can be applied to a range of electric motors from fractional horsepower to 100 horsepower or more.

Total project cost: \$486,484

Funding request: \$389,184

Project Lead: Advanced Energy

Project Participants: Raser Technologies, Inc., Washington State University Energy Program

Start Date: March 28, 2005

End Date: September 28, 2006

Presentations/Publications

None.

Patents

None.

Progress in Past Quarter and Current Status

For the second quarter of 2006, Raser Technologies completed their development testing of the FLEXMOD controller and came to Advanced Energy for two weeks of verification testing. This testing occurred June 5 through June 15. There were several anomalies during the testing that will be documented in the final report. Namely, two smaller horsepower standard induction motors were tested instead of one standard and one pancake motor. This completes task 6 of the project.

Upon completion of this testing, Raser submitted an invoice for the remaining balance of their funding. This invoice reflects additional cost share supported by Raser during their development testing. Note that the total cost share should exceed 50% by the completion of the project.

Plans for Next Quarter

Now that testing is completed, Advanced Energy and Raser will work jointly to complete task 7, Test Data Analysis and Report. Washington State University is ready to disseminate results when they are complete. We are making arrangements to present the results at the Electric Drive Transportation Association Conference in November 2006.