



**RIVERSIDE ENERGY EFFICIENCY LABORATORY
ENERGY SYSTEMS LABORATORY
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January 24, 2011

Mr. Felix Lopez
Senior Engineer
SECO
111 East 17th Street
Room 1118
Austin, TX 78701

Dear Mr. Lopez,

A request was made of the Energy Systems Laboratory (ESL) at Texas A&M University, College Station, Texas, to provide a third party analysis of the test results for the M2G boiler load sequencing device from Greffen Systems, Inc. In this regard, I was contacted by Dr. David Claridge, Director of the Energy Systems Laboratory, and in my capacity as the Director of the Riverside Energy Efficiency Laboratory (a division within ESL), I agreed to provide third party validation of the pilot results. The technology to be validated was piloted at the Cypress Fairbanks independent school district (CFISD) in the Houston area. It is my understanding that CFISD is the third largest school district in the state of Texas.

The pilot was initiated by Cypress Fairbank's Energy Manager, Glen Rhoden. As evidence by his resume, he has an extensive background in energy. Mr. Rhoden has a degree in HVAC from San Jacinto College and has been employed at CFISD since 1992. He became the district's first Direct Digital Controls technician, and in 2001 was promoted to the role of Energy Manager. Glen is a Certified Energy Manager (CEM) and also holds a Certified Energy Procurement Professional (CEP) certification. Mr. Rhoden recently became the statewide President of the Texas Energy Manager's Association (TEMA).

Cypress Fairbanks is currently recognized as one of the most energy efficient school districts in the state. Greffen Systems approached Glen and the CFISD several months ago and suggested they conduct a pilot of the M2G technology. Cypress Fairbanks agreed to conduct a 30 day test of the M2G on three of the district's boilers and to subsequently report the findings to both the district and to SECO.

The pilot was conducted using a day-on/day-off methodology regulated by timers on each boiler that allowed the M2G to operate on alternating days. Dent Data Loggers recorded each boiler firing event and measured boiler cycling over the testing period. Temperature sensors were placed in each facility to measure possible deviations in comfort levels.

On November 17, 2010 I was present for the M2G installations in Houston. At the conclusion of the 30 day test period, I received the test data from the pilot locations and have verified the energy savings of the M2G. The M2G boiler sequencing controller produced an average savings in natural gas of approximately 21% over the pilot period and demonstrated a viable energy saving technology for the school district. The return on investment for the M2G was approximately 11 months. The compilation of the data can be found in the Greffen Systems Pilot Study Report submitted to CFISD.

In summary, the 21% natural gas savings determined during the pilot testing demonstrates that the M2G can be a cost effective tool for reducing the consumption of natural gas. In this regard, the M2G should be considered as a viable energy saving technology by agencies operating closed loop hot water boilers in the state of Texas.

Please review the attached study and contact me with any questions.

Sincerely,

Dr. Michael Pate
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