Colorado State University

Department of Mechanical Engineering
1374 Campus Delivery
Fort Collins, CO 80523-1374
(970) 491-6558
FAX: (970) 491-3827
http://www.engr.colostate.edu/me

October 8, 2010

Ms. Stacy Romero
Colorado Dept. of Agriculture - Markets Division
700 Kipling Street, Suite 4000
Lakewood, CO 80215-8000

RE: Interim Status Report for the Energy Efficiency Assessment in Agriculture Program: April 2010 through September 2010

Dear Stacy,

Below please find an update on the status of the Energy Efficiency Assessment in Agriculture Program for the period from April 2010 - September 2010:

TASKS COMPLETED AND PROGRESS TOWARD EXPECTED OUTCOMES

1. Funds for the project were received from CDA on April 1, 2010

2. Prior to receiving funds, Mike Kostrzewa and Jerry Johnson of CSU met with Eric Lane of CDA on January 22 to discuss strategy and aspects of the project. The results of the meeting include the following key points:

    a. A meeting should be held to select ag sectors, geographic distribution, and potential ag producers that would be interested in participating in the program. Invitees might include the CSU Clean Energy Specialist, a USDA NRCS representative, Eric MacPhail of CSU Extension, and Bill Midcap from RMFU.
    b. Potential operations included feedlots, irrigated crops, dryland wheat operations, dairies, greenhouses, and food processing.
    c. The team recognized the need to be careful about serving operations that are too big – the goal should be to start with mid-size operations first.
    d. Transportation fuels (both on-farm and transport) should be considered.
    e. Ag economists should be included on the team for their input.
    f. Water aspects as it relates to energy should be considered, both for irrigation and processing (cleaning) water
    g. Consideration or both corporate and family farm operations should be considered
    h. Timing will be an issue – ag producers typically have greater availability after harvest
    i. Deliverables should include an accounting of Best Management Practices for section and include templates for other producers to use. There is a need to be able to extrapolate results not just to the individual but also to the ag sector.

3. During the summer, Mike Kostrzewa was contacted by several parties interested in applying for the program or getting otherwise involved, including the following:

a. Rich Mullaney, CSU Extension and Golden Plains Community Energy Coordinator in Holyoke
b. Tim Edgar, CSU Extension and Golden Plains Community Energy Coordinator in Sterling
c. Jeanna M. Paluzzi, CSU Extension and San Luis Valley Community Energy Coordinator in Monte Vista

4. Mike Kostrzewa and Jerry Johnson met on September 17 to re-engage in the program after the summer. Jerry has a team of graduate students to work on the project, including an ag economist, a geneticist, an agronomist, and two students working on oil seed properties.

5. A graduate student was also selected from Mechanical Engineering. Doug Hopper is a former faculty member in the CSU College of Agriculture and greenhouse director. He also has nine years experience conducting energy audits with the CSU Industrial Assessment Center.

PRELIMINARY FINDINGS/KEY ACCOMPLISHMENTS TO DATE

1. Due to a heavy summer schedule on other projects, no energy audits have been completed to date. But the technical team has been assembled at CSU and the expectation is that clients can be identified this semester so that audits can be conducted now that harvest season has ended.

PROBLEMS ENCOUNTERED/MITIGATING CIRCUMSTANCES

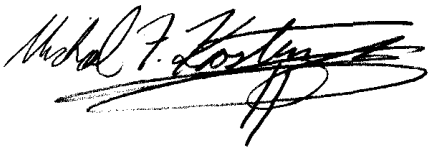
1. A heavy summer schedule on other projects delayed the start of the project. It was decided to delay assembling the CSU Ag/Engineering team until after the Fall semester began.

NEXT STEPS

1. A strategy meeting will be scheduled in October to include the key project personnel at CSU, CDA, GEO, RMFU, and others. From this meeting, sectors/locations/clients will be identified and CSU personnel will begin the process of contacting potential clients, scheduling audits, and conducting energy audits. It is hoped that all of the eight energy audits can be conducted in the final six months of the project, but the school calendar and travel distances may make it impractical to conduct field work until winter break.

2. No changes in the anticipated timeline are expected at this point. But there is a possibility that an extension may be requested if the field work cannot be scheduled in a timely fashion.

Sincerely,



Michael Kostrzewa, P.E.
Senior Research Associate, Mechanical Engineering

Colorado State University