Final Technical Report

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Executive Summary

Since its inception, the University of Florida Industrial Assessment Center has successfully completed close to 400 energy assessments of small to medium manufacturing facilities in Florida, southern Georgia and southern Alabama. Through these efforts, recommendations were made that would result in savings of about $5 million per year, with an implementation rate of 20-25%. Approximately 80 engineering students have worked for the UF-IAC, at least 10 of whom went on to work in energy related fields after graduation. Additionally, through the

popular course in Industrial Energy Management, many students have graduated from the University of Florida with a strong understanding and support of energy conservation methods.

Task Summary

Task 1: Conduct Industrial Assessments, to include a variety of plant types and sizes and well as coverage of the geographic area defined in the Annual Workplan Industrial Assessments: *83 assessments were performed over the life of this award, some of which were multiple-day assessments for larger facilities. These assessments were performed for small to medium manufacturing plants throughout Florida, southern Alabama and southern Georgia. An average of nine to 10 assessment recommendations (AR's) were made per facility.*

Task 2: Promote and increase the adoption of assessment recommendations and employ innovative methods to assist in accomplishing these goals. *Throughout the course of this award, the University of Florida IAC made efforts to improve the readability of their reports, including more technical background, web references, photos and color reports. The use of the Analytical Hierarchy Process assured that we were working on AR's of interest to our clients. We included a checklist of implemented AR's for our clients, which were pointed out to them at the beginning of the audit day during the sample report review.*

Task 3: Promote the IAC Program and enhance recruitment efforts for new clients and expanded geographic coverage. *We work closely with the utility representatives from around the area, and through them were able to find clients throughout our territory of central, northern and western Florida, southern Georgia and southern Alabama. Because our territory is large, we perform 3-4 assessments "on the road" between semesters so that we can serve our distant clients, while also allowing our students to miss minimal class time. Additionally we use the Florida Manufacturer's directory to identify potential clients, and work within the network of UF alumni and friends to find clients. We have also had clients find us through the DOE website.*

Task 4: Provide educational opportunities, training, and other related activities for IAC students. *We have a large, talented pool of graduate and undergraduate students to work with due to the fact that the University of Florida is the flagship state university in Florida, and is located in a relatively small city. As a result, we typically have 8-10 students working for us at any one time. These students come to us from the Industrial, Mechanical, Chemical and Electrical Engineering departments, and some of them are pursuing additional degrees in Business or Engineering Management. Although we do our own in-house training, many students come to us after taking our popular 3-credit Industrial Energy Management course.*

Task 5: Coordinate and integrate Center activities with other Center and IAC Program activities, DOE's Industrial Technologies programs and other EERE programs. *The UF-IAC is a strong promoter of the suite of software tools offered by the DOE. We have a AirMaster+ specialist, and training in other ITP tools. We performed an assessment of the Kennedy Space Center through the FEMP program.*

Task 6: Other tasks or special projects, as needed, and as determined by DOE to be advantageous to the program and in furtherance of IAC Program goals. *We are partnering with some universities in Latin America to start Industrial Assessment Center programs in their countries. We have been active participants in energy conferences and regularly present papers at these conferences. We have had numerous student honors projects that support our UF-IAC, most recently in linking energy and productivity, and assessing energy savings through roof coatings.*