



**Research Center for Energy Conversion
Centre de recherche en conversion d'énergie
RCEC/CRCE**

**University of Moncton
Moncton, NB, E1A 3E9**

Analysis of the Test Results

The RCEC has examined the test results obtained in Puerto Rico on two six ton Air Conditioning A/C equipment from McQuay and A&P equipped with the Magnetizer Energizer.

The units were monitored by a StowAway data logger. The following parameters have been measured; air temperatures and humidity across the evaporator and condenser, pressures, as well as amperage and voltage.

The baseline results were obtained under R-22 with the refrigerant Magnetizer Energizer not installed. The baseline testing was carried out for A&P from October 13, 2003 to October 19, 2003 and for McQuay from November 15, 2003 to November 23, 2003.

The baseline test results were compared to the results obtained under similar degree-days with the Magnetizer Energizer installed on both pieces of equipment according to the manufacturer's guidelines. The comparative study based upon the field testing revealed the following;

1. The McQuay A/C equipment with the Magnetizer Energizer installed tested during the periods November 13 to November 21, 2003 and January 13 to January 21, 2004 showed a **saving in the power consumption on the average of 19% compared to the baseline data**. Other benefits such as shorter refrigeration cycles, lower head pressures were observed too.
2. The A&P A/C equipment was also monitored with the Energizer installed from October 27, 2003 to November 1, 2003 and January 03, 2004 to January 11, 2004. The results showed **on the average a reduction of the power consumption of 13%**. Other benefits were also noticed as with the McQuay system.