SUMMARY.

A data acquisition system, automatically controlled by a Motorola MEK6800D2 Evaluation Kit II, was set up to take and store measurements of the commercial electricity supply provided by The Trinidad and Tobago Electricity Commission (T&TEC) at any consumer terminal.

Although, owing to equipment constraints, continuous supply monitoring was not possible, several intermittent sets of measurements made at a 230 volts consumer terminal showed evidence of at least 5% voltage variation from the declared value, less than 0.1% frequency variation from the nominal 60Hz value and low levels of frequency harmonics present in the mains supply.

Also, recommendations were made to upgrade the capabilities of the system to achieve continuous monitoring of the mains supply and hence an accurate assessment of mains supply stability.