ABSTRACT

Electricity could be considered as one of the most essential requirements in the Sri Lankan Lifestyle. Sri Lanka is an island nation and an equatorial country, easily available with numerous methods to generate electricity by using non-conventional renewable energy sources. However, 77 percent of Sri Lankans electrical energy generation depends on fossil fuels and coal. This situation leads to demanding of county's revenues as well as environmental pollution. Energy conservation is one of the solutions for this problem, which can reduce the energy demand of the country, if it is practiced efficiently. Energy conservation means the reduction of energy demand without been affected or reduce the quality or the quantity of final productivity.

The researcher has followed the deductive quantitative method to conduct this scientific research and derived independent variables via conducting an electrical energy audit at the selected SLAF establishment. The results obtained through the electrical energy audit was tested with known theories. In the end, H1 was not proven and found that prevailing measures taken by the SLAF to reduce its energy demand would not be sufficient to reach its goals.

Therefore, it is recommended that, amalgamating of several energy conservation methods under a scientific methodology could gain much more results than the present outcome. At the end of the research, the researcher found that the electricity bill could be decreased by 20.5 % at the sample Station. Therefore, this achievement could lead the SLAF to achieve the goals of the Sri Lankan Government's "National Programme on Energy Demand Side Management, Efficient Energy Use and Energy Conservation – The Presidential Task Force on Demand Side Management programme".

Key Word: *Energy Conservation*