

DOMESTIC CONSUMER'S AWARENESS OF ELECTRICITY CONSERVATION



Rajapakse Pathirage Don Ajith Premalal

FGS/02/10/02/2010/032

B.COM (Special)

Thesis submitted to the Faculty of Graduate Studies in partial fulfillment of the requirements for the Master of Commerce Degree

ප්‍රවේශ අංකය:	TH 822
වර්ග අංකය:	

Department of Commerce & Financial Management

Faculty of Commerce and Management Studies

University of Kelaniya

Sri Lanka

July 2012

ABSTRACT

The focus of this research study is to understand the effectiveness of the awareness efforts of the Sri Lanka Sustainable Energy Authority (SLSEA) in order to conserve the electricity. In Sri Lanka electricity demand is unequally distributed during a day. At the 18.30 hours, the electricity demand load is increased. The major reason for this load increase is the immense of lighting load and the use of other equipment during the peak period. The demand load increasing during the peak hours is unbearable situation to supply the electricity to the consumers. The low cost Hydro electricity Generation demand capacity is insufficient to meet the peak demand. Hence the high cost thermal power generation plants should be operated to meet this increasing demand. One of the appropriate alternative to avoid this situation is to aware the domestic consumers in order to conserve the electricity. Hence, the research problem is whether domestic consumers' awareness has been effected to conserve the electricity demand. The rationale or argument built of this study is the electricity conservation is increased due to consumers' awareness efforts.

The secondary data of the 1799 domestic consumers in sample have been used to measure the electricity conservation occurred during the study period. Further, the questionnaire has been administered to 150 domestic consumers to gain the evidence of consumer behaviour, and to fulfillment of the secondary objectives of this research study. According to the outcomes of this study, the domestic consumers of over 180 kWh (kilo Watt per hour) unit block have been positively responded to conserve electricity for awareness efforts by the Sri Lanka Sustainable Energy Authority. Some affecting factors to the load curve have been identified. However, It is observed that no positive impact of the domestic consumers' awareness to minimize the burden on the National grid. Finally, the implication of the well-designed awareness program, replacing Incandescent Filament Lights with Compact Florescent Lights, the curtailment of subsidy granted for low-income consumers on electricity tariff, and implementation of cost reflective tariff have been recommended, as changes to solve the research problem.

Key Words : Domestic consumers, awareness, conservation, peak hours, SLSEA