ANALYSIS OF ELECTRICITY CONSUMPTION PATTERNS IN SRI LANKA FOR A NEEDS BASED PLANNING MODEL

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Abstract

In this research project, we have formulated a model to apply a Needs based approach in Electricity Planning for Sri Lanka. We have identified the sectors of electricity use where the Needs based approach can be applied and the major electricity Needs in each sector. Here the concept of 'representative Needs' instead of real end-user Needs, was used to make the model practical and the database manageable. The Needs based approach is applied to project electricity demand for the major electricity Needs, whereas the electricity demand projection for the rest of minor electricity Needs is done by one of the other available methods.

As analysis of Demand is an essential part in a model based on Needs, the electricity consumption patterns were analyzed. The specimen demand projections done for the domestic sector, for the tea industry and for the hotel sector show that the model based on Needs is a best alternative in a free market economy or in a mixed economy. A computer programme was written for easy computation.