

ELECTRIC CONSUMPTION IN SHSS IN RURAL COMMUNITIES OF BRAZIL AND PERU AND RECOMMENDATIONS FOR SIZING

Federico Morante* and Roberto Zilles

Instituto de Eletrotécnica e Energia. USP

Av. Prof. Luciano Gualberto, 1289, 05508-010 São Paulo, Brasil.

The lack of data records of electric power consumption of small photovoltaic home systems, independently of the method used for sizing them drives to consider the demand as a constant. However, the existing data reveal the variability of the consumption due to the influences of some social, cultural and psychosocial aspects of the human groups. This paper presents records of consumption data obtained from several solar home systems (SHSs) in Brazil and Peru, and it discusses about the Gamma distribution function that can express to a great extent the behaviour of the demand. By this analysis it was verified that 'a lot of people consume little and few people consume a lot'. In that sense, a few recommendations for sizing procedures that can be useful in the implantation of extensive programmes of rural electrification by SHSs are presented.

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Key words: solar home systems; rural electrification; power consumption.