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PERFORMANCE EVALUATION OF WIND  
ENERGY CONVERSION SYSTEMS USING THE  
METHOD OF BINS - CURRENT STATUS

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ABSTRACT

A detailed description of the method of bins, a technique of data collection and reduction for field performance evaluation of Wind Energy Conversion Systems (WECS) is provided. The method of bins is a straightforward yet useful approach to the complex problem of relating the response of a WECS to a variable wind field. Examples of typical results obtained using the method of bins are presented. Methods of determining that the measure of performance of a WECS obtained is correct are outlined. Areas in which further modifications to the technique may be appropriate are also discussed.