Research Title Development of Monitoring system Solar Energy and Wind Energy to generate Electricity in Sakon Nakhon Rajabhat University
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Abstract

This paper presents the development of monitoring system solar energy and wind energy to generate electricity in sakon nakhon rajabhat university. By applying dsPIC30F3013 microcontroller for measuring solar radiation and wind speed. This information will be used as the reference information for producing the electricity in sakon nakhon rajabhat university and nearby area that requires this information. The developed system was installed as the measuring station. The major components of this system are sensors and data acquisition system. The acquisition system will record the data into a database and also display the data in real time format. The recorded data can be used analyze for assessing the potential of energy and planning of using potential energy in the future. The results show that the developed system has the accuracy within the accepted level, high efficiency, and can be used practically. The accuracy of the developed can be confirmed by comparing the measurement results with the standard software and Equipment.

Keywords Solar Energy, Solar Radiation, Wind Energy, Wind speed