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Hybrid Tidal, Solar, and Wind Power Generation

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Abstract: *Now a day's electricity is most needed facility for the human being. All the conventional energy resources are depleting day by day. So we have to shift from conventional to non – conventional energy resources. This process reviles the sustainable energy resources without damaging the nature. We can give uninterrupted power by using hybrid energy system. Basically this system involves the integration of two energy system that will give continuous power. Solar panels are used for converting solar energy and wind turbines are used for converting wind energy into electricity. This paper presents the Solar – Wind hybrid power system that harnesses the renewable energies in Sun and Wind to generate electricity. This hybrid solar – wind power generating system is suitable for industries and also domestic areas energy resources. Hybrid tidal, solar, and wind power generation systems offer a promising approach to addressing the challenges of renewable energy variability and intermittency. This abstract explores the integration of multiple renewable energy resources to create a more reliable and sustainable power generation system. By combining tidal, solar, and wind energy technologies, these hybrid systems aim to optimize energy production, increase grid stability, and reduce reliance on fossil fuels. Key aspects of hybrid system design, including integration strategies, technological considerations, and potential benefits and challenges, are discussed. The abstract highlights the potential of hybrid tidal, solar, and wind power generation as a viable solution for meeting growing demands while reducing environmental impact and advancing the transition to a clean energy future.*

Keywords: Electricity, Energy, Solar panel, Wind energy, Wind hybrid power

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