Chapter 2

A BRIEF OVERVIEW ON ALTERNATIVE HYBRID ENERGY SYSTEMS

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INTRODUCTION

It is widely accepted that electric vehicles would have a big part of consumer needs and also they would require more energy sources near the future. Even though renewable energy sources which are cost-effective and environment-friendly arouse interest in the whole world, the rising demand of electricity provokes to focus on alternative method in that hybrid energy generation system discusses in terms of the cost optimized and efficiency.

The hybrid energy system (HES) is known as the combination of both renewable and nonrenewable sources or HES is a combination of both and new sources of energy. The conventional sources of energy are moderately replaced by the clean energy sources (1-2), i.e., the generation of electricity used petrol based engines are replaced by renewable sources like solar panel (3-5). HES has decreased the cost and improved the efficiency of the system. Thus, it has been said that when used more than one source for the generation of electricity the cost of a standalone system may be reduced (5,6,7,8,9). The hybrid system may be defined as the mixture of energy producing and storing. That's why renewable energy like solar, wind, etc. is represented as the best energy sources reused. This system has some advantages such as optimizing cost and environmental-friendly due to it

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