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Paper Title: Zero Energy House in Iraq

Abstract: The residential load is one of the largest components of the electrical load in the Iraqi power system. We can supply a part of the residential loads by utilizing the renewable energies. Recent research's show that the applications of a hybrid power system is preferable to achieve this goal. For residential loads connected to the grid (on grid) with the possibility of energy exchange (buying and selling) to the grid, the addition of suitable hybrid power system can reduce energy cost to zero (zero energy house). The paper studied the possibility of supplying residential load in the city of Mosul - at north of Iraq by using a hybrid renewable energy system to reach zero energy cost. The paper obtains this optimal hybrid system components for various cases. HOMER software was used to study the system to feeds the residential loads.

Keywords: Hybrid power system; grid connecting; Residential load; Solar Water Heating; Zero energy building.

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2.

Authors: Ghadah Al-Khafaji, Hazeem B. Taher, Nura Anwer Abdulzahara

Paper Title: Increase the Capacity Amount of Data Hiding to Least Significant BIT Method

Abstract: In this paper a new strategy to increase the number of bits hiding in each image for LSB method is suggested to give more data capacity with high secure stegano image. The technique of hiding a private message within a file in such a manner that third party cannot know the existence of matter or the hidden information. The purpose of Steganography is to create secrete communication between the sender and the receiver by replacing the least significant bits (LSB)of the cover image with the data bits depending on the type of the pixel class if it is edge then exchange two bits else one bit exchanged.

Keywords: Image steganography, text hiding, Least Significant Bit algorithm.

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