

## **Abstract**

In this study, the idea of installing a solar cell system was discussed for the Rafidia Governmental Hospital building, which is located within the concession of the Northern Electricity Distribution Company.

The net metering system was used according to the company's requirements and in accordance with the Energy Quality Authority laws agreed upon by the Council of Ministers for the year 2015.

The electric bills necessary for the study were collected and analyzed with the aim of using renewable energy in the hospital. Several field visits were made to the site in order to take the necessary engineering measurements, look with the naked eye at the direction of the sun, and take the correct opinion of the installation locations of the solar cells, the way the cables pass, and the locations of the inverters.

The engineering design was done using AutoCAD. PV system and financial accounts using Excel.