

Mauritania energy storage for peak shaving

Thank you for visiting nature . You are using a browser version with limited support for CSS. To obtain the best experience, we recommend you use a more up to date browser (or turn off compatibility mode in Internet Explorer). In the meantime, to ensure continued support, we are displaying the site without styles and JavaScript.

This paper proposes a distributed heating peak shaving system (DHPS), which integrates indirect solar flat plate collectors, electric thermal storage tank (ETST) and AHP, is retrofitted in parallel with a traditional heat exchange station to enable peak-shaving for heating, as shown in Fig.5. The DHPS combines centralized conventional heat sources with distributed clean energy, enabling coordinated operation. The operational process of the system is as follows:

During periods of high load demand, the solar collectors absorb solar radiation to heat the working medium. The heated medium exchanges heat with the water in the ETST through a small heat exchanger configured in the collector (flow(1)). After the heat exchange process, the water is either insulated or electrically heated to the specified outlet temperature, then flows towards the generator of the AHP as the driving heat source (flow(2)).

During the period of heat load valley, when the heat load demand decreases and solar radiation increases, the primary network ceases operation. The solar collectors and ETST are the only active components providing hot water to the secondary network, meeting the entire user's heat load requirements through heat exchange station (flow(5)).



Mauritania energy storage for peak shaving

Contact us for free full report

Web: <https://www.hollanddutchtours.nl/contact-us/>

Email: energystorage2000@gmail.com

WhatsApp: 8613816583346

