

To: SEM SYSTEMS Ltd (part of SEMAN Group)
35-37, Dimitar Hadzhikotsev Str., Lozenets
Sofia, Bulgaria

Limassol, Cyprus 24/9/2024

Dear Sirs,

We would like to inform you about the successful results of your project regarding the optimization of voltage-current quality and energy saving at our hotel facilities, PARKLANE HOTELS LIMITED, in Limassol, Cyprus.

Under this project, specialized interventions were designed, manufactured, and successfully installed by SEM SYSTEMS. All equipment used is based on special specifications derived from your scientific study and includes technologically advanced materials from leading international manufacturers of industrial equipment (ABB, RITTAL, SIEMENS, EPCOS). The project was completed and put into operation in June 2023. Throughout the collaboration, the engineers and technicians of SEM SYSTEMS Ltd demonstrated exemplary behavior, precision, and professional dedication. Furthermore, more than a year has already passed since the project became operational, and the energy saving interventions continue to operate uninterrupted, confirming the high quality of their design, manufacturing, and installation.

It should be highlighted that during project operation, the hotel's electrical installation experienced numerous benefits. For example, voltage and current harmonics were noticeably reduced, preventing pollution of the electric network of the facility. Interactions between electric loads and power transformers, which are often related to harmonic resonance and voltage drops issues, were eliminated. Voltage levels at our facility's electric loads improved close to nominal values, resulting in increased efficiency, while the significant reduction in current and voltage harmonics further enhanced the efficiency of both motors and power transformers. Thermal losses in cables, power distribution boards, and other electrical equipment were drastically reduced due to the suppression of harmonics and reactive currents within the electrical installation. Additionally, the power factor, both for reactive and harmonic currents, was

optimized at local and central levels. Finally, a significant increase in the reserve capacity of our hotel's electrical installation was observed, allowing for the future supply of additional electric loads at minimum construction costs.

The evaluation of the electric energy saving achieved was based on measurements conducted under various operational scenarios of the hotel, both with and without the energy saving interventions into operation. The measurements focused on the active values of the supply current (Irms), from which the electric energy consumption is derived. Finally, the weighted average reduction of Irms values for all electric loads amounted up to 7.3%, as stipulated in the contract.

In conclusion, the project of SEM SYSTEMS Ltd is deemed successful, as it has surpassed its contractual energy saving target, while providing significant benefits to the operation of our hotel's electrical installation.

For PARKLANE HOTELS LIMITED,

PARKLANE RESORT AND SPA



Mr. Philippos Evtipidou
Director of Engineering