

Case Study

Maximum Security Prison Saves 11.9% on Electricity Expenses

MARKET REQUIREMENTS

One of Israel's maximum-security prisons is situated at a secluded desert area in southern Israel. This large and highly guarded facility incarcerates many prisoners and is heavily staffed, and, as expected, operates 24/7, all year round.

The prison has steep electricity expenditures generated by heavy duty perimeter lighting, internal lighting, professional kitchen appliances (refrigerators, freezers, ovens, etc.), cooling and heating systems, security systems, and many other electrical devices.

The penitentiary's administration searched for a practical solution to lower electricity expenses, decrease related maintenance costs, and reduce CO₂ emissions in order to protect the environment.

SOLUTION

In order to adhere to its energy saving and cost reduction strategy, the prison's management published a tender and evaluated several electricity saving options. PowerSines' advanced solution was selected.

PowerSines Ltd. installed and commissioned two units of ComEC VS (models 400A and 800A), equipped with PowerSines Remote EMS (energy management system) which runs on a cloud platform. This enabled the site's administration to have a centric and flexible management solution accessible from anywhere, anytime and over any platform.

RESULTS

PowerSines' ComEC VS achieved 11.9% direct saving in electricity expenses at the prison's facility by reducing, optimizing and stabilizing the power level supplied to the penitentiary.

Moreover, considerable indirect savings were noted, reducing ongoing maintenance costs of electrical equipment.

The penitentiary also achieved notable reduction of CO₂ emissions, contributing to a cleaner environment.

11.9% direct saving in electricity costs

Voltage stabilization and over-voltage elimination

Increased equipment lifespan and reduced maintenance costs

Mounted onto existing electrical infrastructure

IoT Cloud enables remote Energy Management and control (EMS)

Reduction of CO₂ emissions

