

Company Name

ELECTRICAL MAINTENANCE Department

HALYPS BUILDING MATERIALS

Aspropyrgos, 11 July 2011

Dear Dr. Satsios,

We have the pleasure to submit you our ascertainments regarding the Project for the Improvement of Voltage-Current Quality and Electric Energy Cost Saving that was carried out by your company, SEMAN SA, in the electrical installations of our factory which is activated in the division of Cement with the trade name “Halyps Cement”, member of Italcementi Group, being the leader in Europe as regards the cement production and holding the 3rd rank worldwide.

The project concerned the optimization of power quality by current-voltage harmonics reduction, the improvement of motors’ and power transformers’ efficiency, and the minimization of the reactive currents in the inner of the factory’s electrical installation, as well. In the context of the above mentioned project that was completed in the March of 2010, interventions for the voltage current quality improvement-saving were installed with the total power reaching the 5,2 MVar. The interventions nstalled in different voltage levels, according to the kind of the loads, namely in the Low Voltage (400V and 550V) and in the Medium Voltage (660V), even in the departments of the factory where difficult conditions are prevalent. In addition, an integrated SCADA Measuring System which gives the possibility to display in real time and record all the basic energy and power values, as well as the total harmonic distortion of current and voltage, with capability to store all these data to a central computer for farther process in the future.

After the completion of the project, measurements and recordings were performed that demonstrated significant reductions in currents, improvement of voltage levels, reduction up to eradication of the requested reactive power.

The evaluation of the saving project result was realized according to the methodology described in the Official Government Gazette Issue 1526\_27.07.1999 and to the International Standards:

[1] Council Regulation(EEC) No 1836/93 of 29 June 1993 allowing voluntary participation by companies in the industrial sector in a Community eco-management and audit scheme.

[2] International Performance Measurement & Verification Protocol. Concepts and Options for Determining Energy and Water Savings, Volume 1, Revised March 2002.

[3] North American energy M&V protocol, version 1 March 1996.

The guaranteed saving rate 5,32%, according to the contract, not only is accomplished but is exceeded reaching the 9,00%. Therefore, the initial saving target is highly achieved, leading to a shorter pay-back period.

Consequently, we would like to announce you that we consider the Project for the Improvement of Voltage-Current Quality and Electric Energy Cost Saving absolutely successful, because contributed to significant money saving in electricity bills making our company more competitive in the present difficult period of the economic crisis.

Best regards,

Pantelis Vavalos

Nimas Nikolaos



Energy Saving Manager



Electrical  
Department  
Manager