FAULT LEVEL CALCULATIONS FOLLOWING THE OPERATION OF THE 'VASILIKOS' POWER STATION

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DEDICATION

THIS PROJECT IS DEDICATED
TO MY FAMILY AND MY FRIENDS

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Mr. Ch. Chrysafiades

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SUMMARY

This project deals with the expected rise of the prospective fault levels in the network of the Electricity Authority of Cyprus with the establishment of the '**Vasilikos**' power station. These expected fault levels shall be under study so that the whole system is adjusted in order to avoid any malfunctioning and to provide normal operation. To do so, fault analysis is provided.

The expected fault levels can be calculated by a Power System Analysis (PSA) package. The PSA program calculates the dynamic response of an electrical power system to network fault and branch switching disturbances. By focusing on the modeling of the power system components and on a proper use of the PSA output the fault levels of a power system can be handled.

After performing the fault level calculations the system under study is more reliable and the case of damage is minimized. The three phase faults are proved to be more severe than single phase to earth faults. The busbars which are close to the generators have greater single phase fault than three phase fault.