

HIGHER TECHNICAL INSTITUTE

ELECTRICAL ENGINEERING COURSE

DIPLOMA PROJECT

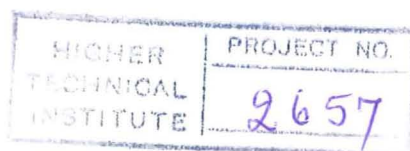
E1066

**POWER FLOW ANALYSIS OF THE
TRANSMISSION SYSTEM, AS IT WILL
BE EVOLVED AFTER THE
ESTABLISHMENT OF THE NEW POWER
STATION "VASILIKOS"**

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SUMMARY

Load Flow Analysis

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The main objective of this project is to study **Load Flow Analysis** of Power Systems in general and computer methods that are used in this field. In particular, the project examines the Load Flow Analysis of the whole Transmission Network of the Electricity Authority of Cyprus (E.A.C.) as it will be evolved with the establishment of the **new Power Station "VASILIKOS"**. The system is analyzed using the Power System Analysis program (PSA program -Load Flow option) available at the E.A.C..

The realization of this project necessitates representing the certain evolution, which the Transmission Network of the E.A.C. will undergo after the establishment of the "VASILIKOS" Power Station, forming a file in the format demanded by the PSA program at the Authority (file which includes all the busbars and branches -lines, transformers, etc.- of the network with their corresponding values), running this program on a PC, representing the Load Flow output results in Graphical Form(using the available software packages), studying the Load Flow results, inferring on them and carrying out possible modifications.

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