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| Faculty: FACULTY OF ENGINEERING | |
| Subject : Specialized 3rd Year Laboratory | Review : |
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UTM
UNIVERSITI TEKNOLOGI MALAYSIA

SCHOOL OF ELECTRICAL ENGINEERING
FACULTY OF ENGINEERING

SKEE3742
ADVANCED POWER LABORATORY
PROBLEM
Power Factor Correction

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Problem:

The manufacturing facility of Textile Family Sdn. Bhd. Has been installed with a capacitor in order to avoid low power factor penalty from TNB. However, after a few months, the company was again charged a penalty for a low power factor on April and May of that year. The following months show a fluctuation of a power factor charge. From an investigation that has been executed by the Energy Manager, it has found that the company has increased its production on April and May to fulfil the extra demands on the curtains and sheets. However, on June onward, sales are fluctuating due to consumers' demand and also the inconsistent prices on the raw materials. You as a facility engineer have been assigned by the manager to investigate the issue. Thus, you and your team member are required to identify the cause and the possible solution of this problem. The proposed solution must be validated using available equipment in the laboratory.