CHAPTER VII

CONCLUSIONS

The matrix method used in this investigation determine
fault current and voltage distribution in a direct way. It
requires a very small amount of time in computing the distributions.
However in analysing a big system some error will result from the
truncate of values during the arithmetic steps in the inversion
of the matrix. Consequently, some correction has to be done in
that case.

The developed programs have been found to be able to be
used to analyse a short circuit problem within the scopes of
the assumptions and limitations. In order to obtain a more
accurate solution the effects of mutual inductance between lines
and the effects of phase shift in transformers should be taken
into consideration.

The division of a big program into several small programs
is the disadvantage of the method developed. It causes several
loadings of cards, a lot of manual work in the programming and
the lost of accuracy. Manual work can easily cause mistakes in
an analysis and is a waste of computation time. If there is
any more future work on these developed programs, suggestions
are made to either using a computer with bigger storage capacity
or to developed program in another form of language. The SPS
language is found more suitable for developing long programs.