

PARAMES CHUTIMA : PRACTICAL REALIZATION OF OPTIMUM SIZE AND LOCATION OF SHUNT CAPACITORS FOR REDUCTION OF LOSSES ON DISTRIBUTION FEEDERS. THESIS ADVISOR : ASSI.PROF. PRASIT PITTAYAPAT, 236 pp.

This thesis is divided into two parts. The first part is dealing with the procedure for optimally sizing and placing of fixed shunt capacitors on a primary distribution feeder. The second part is concerning with the control scheme for multilevel control of capacitors on a primary distribution feeder, which is exercised through the control of switching on/off of the switching capacitors, in order to reduce energy and power losses. The solutions of these two parts are solved by iterative procedures and two computer programs are developed for the ease of solving these problems. The iterative procedures are modified in order that standard size capacitors can be used. These procedures can be applied in practice to facilitate their immediate use by the electric utility distribution designer.