









system stabilizer for both test systems at various operating conditions.

## Appendix

Machine Data:

$X_d = 1.7$ ;  $X_q = 1.64$ ;  $X'_d = 0.32$ ;  $T'_{do} = 5.9$ ;  $H = 5$ ;  $D = 0$ ;  
 $f_B = 50$  Hz;  $E_B = 1$  p.u.;  $X_t = 0.4$ .

Exciter Data:

$K_e = 400$ ;  $T_e = 0.05$ s;  $E_{fdmax} = 6$  p.u.;  $E_{fdmin} = -6$  p.u.

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