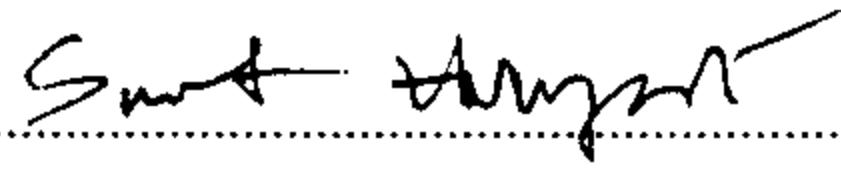
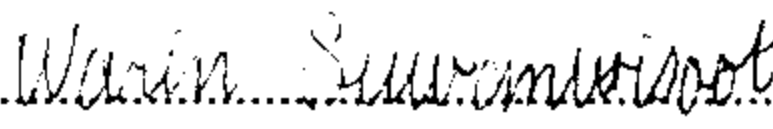


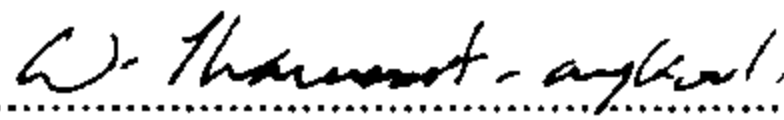
THESIS TITLE: AN INVESTIGATION OF POSSIBLE VOLTAGE COLLAPSE IN
NORTHEASTERN REGION OF EGAT SYSTEM

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ABSTRACT

This thesis presents an investigation of possible voltage collapse in the Northeastern region of EGAT system by modal analysis. Voltage stability can be identified by computing the eigenvalues and eigenvectors of the reduced Jacobian matrix. The magnitude of the eigenvalues provides a relative measure of the proximity to voltage in the system instability. The application of modal analysis helps in determining the stability of the system under certain loads and the ability of the system to carry extra load without voltage collapse. When the system reaches the voltage stability critical point, the modal analysis is helpful in identifying the area at which the voltage may collapse.