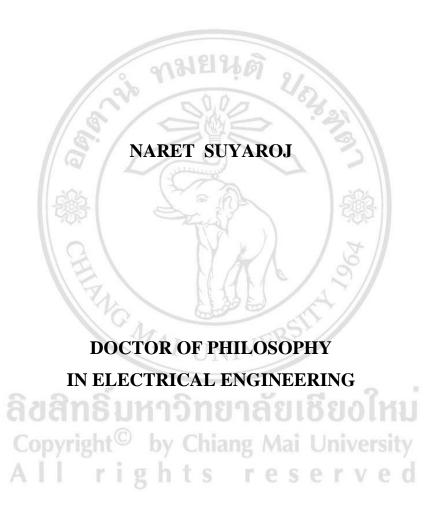
POWER SYSTEM TRANSIENT STATE ESTIMATION CONSIDERING NONLINEAR CHARACTERISTICS OF EQUIPMENT



GRADUATE SCHOOL
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NARET SUYAROJ

A THESIS SUBMITTED TO CHIANG MAI UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

IN ELECTRICAL ENGINEERING

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THIS THESIS HAS BEEN APPROVED TO BE A PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN ELECTRICAL ENGINEERING

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To

My beloved wife, Angkana Suyaroj,
to my mother, Buatong Suyaroj, and my father, Detch Suyaroj.



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