



## **Criterion 1: Curricular Aspects**

#### **1.3 Curriculum Enrichment**

1.3.4.1: Number of students undertaking field projects / internships / student projects

## Programme Name: M.E Power Systems Engineering.

Sl.No.	Description	Page Number
1	Project Work Phase-I	1-14
2	Project Work Phase-II	15-28





## **Criterion 1: Curricular Aspects**

#### **1.3 Curriculum Enrichment**

1.3.4.1: Number of students undertaking field projects / internships / student projects

Programme Name: M.E Power Systems Engineering.

# PG Phase-I Projects Proof





# DIRECTIONAL RELAYING SCHEME BASED ON FAULT CURRENT

A Project (Phase-I) Report

Submitted by

## ARUL KUMARAN.C. D (927621MPS001)

in partial fulfillment for the award of the degree of

## **MASTER OF ENGINEERING**

in

## **POWER SYSTEMS ENGINEERING**

## M.KUMARASAMY COLLEGE OF ENGINEERING

(An Autonomous Institution, Affiliated to Anna University, Chennai)

KARUR-639113

**DECEMBER 2022** 

## M.KUMARASAMY COLLEGE OF ENGINEERING KARUR

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#### BONAFIDE CERTIFICATE

Certified that this project report titled "DIRECTIONAL RELAYING SCHEME BASED ON FAULT CURRENT" is the bonafide work of ARUL KUMARAN.C.D (927621MPS001) who carried out the project work during the academic year 2022-2023 under my supervision. Certified further, that to the best of my knowledge the work reported herein does not form part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

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Mr.N.Selvam, M.E., Assistant Professor, Department of Electrical and Electronics Engineering, M.Kumarasamy College of Engineering, Karur-639113.

Submitted for Project Work Phase I (19PPSP102L) viva voce examination held on 28.12.2022

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i





## POWER TRANSFORMER LOAD FORECASTING SYSTEM USING MACHINE LEARNING ALGORITHMS

A Project (Phase-I) Report

Submitted by

#### JANANI D (21MPS002)

in partial fulfillment for the award of the degree of

#### **MASTER OF ENGINEERING**

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#### **DECEMBER 2022**

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(An Autonomous Institution, Affiliated to Anna University, Chennai)



**BONAFIDE CERTIFICATE** 

Certified that this project report "POWER TRANSFORMER LOAD FORECASTING SYSTEM USING MACHINE LEARNING ALGORITHMES" is the bonafide work of "JANANI D (21MPS002)" who carried out the project work during the academic year 2020-2021 under my supervision. Certified further, that to the best of my knowledge the work reported herein does not form part of any other project report or dissertation on the basis of which a degree or award wasconferred on an earlier occasion on this or any other candidate.

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Submitted for Project Work Phase I viva voce examination held on <u>28.12.2022</u> Internal Examiner External Examiner





## DEVELOPMENT OF IMPROVED ZETA CONVERTER FOR RENEWABLE ENERGY APPLICATIONS

PHASE I REPORT

Submitted by

## KATHIRAVAN G (927621MPS003)

In partial fulfillment for the award of the degree of

#### **MASTER OF ENGINEERING**

in

## **POWER SYSTEMS ENGINEERING**

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#### **BONAFIDE CERTIFICATE**

Certified that this project report "DEVELOPMENT OF IMPROVED ZETA CONVERTER FOR RENEWABLE ENERGY APPLICATIONS" is the bonafide work of "KATHIRAVAN G (927621MPS003)" who carried out the project work during the academic year 2022-2023 under my supervision. Certified further, that to the best of my knowledge the work reported here in does not form part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

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Submitted for Project Work Phase I viva voce examination held on 28-12.22

ii

Internal Examiner

External Examiner





# POWER QUALITY IMPROVEMENT AND HARMONICS REDUCTION METHOD USING NEURAL FUZZY LOGIC CONTROLLER IN TWO STAGE PV-BATTERY SYSTEM

A PROJECT ( Phase-I ) REPORT

Submitted by

**MYTHILI R** 

(927621MPS004)

in partial fulfillment for the award of

degree of

### MASTER OF ENGINEERING

in

#### **POWER SYSTEMS ENGINEERING**

## **M. KUMARASAMY COLLEGE OF ENGINEERING**

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**DECEMBER 2022** 

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#### **BONAFIDE CERTIFICATE**

Certified that this project report "POWER QUALITY IMPROVEMENT AND HARMONICS REDUCTION METHOD USING NEURAL FUZZY LOGIC CONTROLLER IN TWO STAGE PV-BATTERY SYSTEM" is the bonafide work of R.MYTHILI (927621MPS004) who carried out the major project work during the academic year (2022-2023 )under my supervision. Certified further, that to the best of my knowledge the work reported here in does not form part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

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This project work phase - I (927621MPS004) has been submitted for the third Semester

Project viva voce Examination held on  $2^{2-12-2^2}$ 

INTERN

81mm EXTERNAL EXAMINER





#### CONTROL AND OPTIMIZATION OF BI-DIRECTIONAL DC-DC CONVERTER INTEGRATED WITH RENEWABLE ENERGY SOURCE

#### A PROJECT (Phase I) REPORT

Submitted by

#### **REVATHI M (21MPS006)**

#### In partial fulfillment for the award of the degree of

#### MASTER OF ENGINEERING

in

#### **POWER SYSTEMS ENGINEERING**

#### M.KUMARASAMY COLLEGE OF ENGINEERING

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#### **BONAFIDE CERTIFICATE**

Certified that this project report "CONTROL AND OPTIMIZATION OF BI-DIRECTIONAL DC-DC CONVERTER INTEGRATED WITH RENEWABLE ENERGY SOURCE" is the Bonafide work of "REVATHI M (21MPS006)" who carried out the project work during the academic year 2022-2023 under my supervision. Certified further, that to the best of my knowledge the work reported herein does not formpart of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

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Submitted for Project Work Phase I viva voce examination held on \_ 28.12.22

128tnm **External Examiner** 

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# REAL AND REACTIVE POWER CONTROL OF SOLAR GRID TIE INVERTER UNDER DISTORED CONDITIONS

#### **PHASE I REPORT**

Submitted by

SANTHOSH KUMAR K (927621MPS007)

in partial fulfillment for the award of the degree of

## MASTER OF ENGINEERING

in

### **POWER SYSTEMS ENGINEERING**

# M.KUMARASAMY COLLEGE OF ENGINEERING KARUR - 639113 (An Autonomous Institution, Affiliated to Anna University, Chennai)

**DECEMBER 2022** 



#### **BONAFIDE CERTIFICATE**

Certified that this project report "REAL AND REACTIVE POWER SOLAR GRID TIE INVERTER CONTROL OF UNDER DISTORED CONDITIONS" is the bonafide work of "SANTHOSH KUMAR K (927621MPS007)" who carried out the project work during the academic year 2022-2023 under my supervision. Certified further, that to the best of my knowledge the work reported herein does not form part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

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Submitted for Project Work Phase I viva voce examination held on <u>28.12.202</u> 81m

**External Examiner** 





## PERFORMANCE ANALYSIS OF MULTI LEVEL INVERTER

**PHASE I REPORT** 

Submitted by

#### USHA P (927621MPS008)

In partial fulfillment for the award of the degree of

## **MASTER OF ENGINEERING**

in

## **POWER SYSTEMS ENGINEERING**

M.KUMARASAMY COLLEGE OF ENGINEERING, KARUR - 639113

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## M.KUMARASAMY COLLEGE OF ENGINEERING, KARUR - 639113

(An Autonomous Institution, Affiliated to Anna University, Chennai)



**BONAFIDE CERTIFICATE** 

Certified that this project report "PERFORMANCE ANALYSIS OF MULTI LEVEL INVERTER" is the bonafide work of "USHA P (927621MPS008)" who carried out the project work during the academic year 2022-2023 under my supervision. Certified further, that to the best of my knowledge the work reported here in does not form part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

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Internal Examiner

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## **Criterion 1: Curricular Aspects**

#### **1.3 Curriculum Enrichment**

1.3.4.1: Number of students undertaking field projects / internships / student projects

Programme Name: M.E Power Systems Engineering.

# PG Phase-II Projects Proof





## DIRECTIONAL RELAYING SCHEME BASED ON ONLY FAULT CURRENT

#### A PROJECT (PHASE-II) REPORT

Submitted by

## ARUL KUMARAN.C.D (927621MPS001)

in partial fulfillment for the award of the degree of

## **MASTER OF ENGINEERING**

in

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#### M.KUMARASAMY COLLEGE OF ENGINEERING

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KARUR-639113 APRIL 2023

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# M.KUMARASAMY COLLEGE OF ENGINEERING KARUR

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SUPERVISOR

Mr.N.Selvam, M.E., Assistant Professor, Department of Electrical and Electronics Engineering, M.Kumarasamy College of Engineering, Karur-639113.

Submitted for Project Work Phase II (19PPSP103L) viva voce examination held on 11-04-2023

ii





## POWER TRANSFORMER LOAD FORECASTING SYSTEM USING MACHINE LEARNING ALGORITHMS

#### A PROJECT (PHASE-II) REPORT

Submitted by

## JANANI D (21MPS002)

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in

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## M.KUMARASAMY COLLEGE OF ENGINEERING KARUR - 639113

## (An Autonomous Institution, Affiliated to Anna University, Chennai)

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## M.KUMARASAMY COLLEGE OF ENGINEERING KARUR

(An Autonomous Institution, Affiliated to Anna University, Chennai)



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Submitted for Project Work Phase II (19PPSP103L) viva voce examination held on II. 4. 2023

R. Senthal & 11/4/26





# DESIGN AND DEVELOPMENT OF INC-MPPT SWITCHED ZETA CONVERTER FOR SOLAR PV ARRAYS

A PROJECT (PHASE-II) REPORT

Submitted by

## KATHIRAVAN G (927621MPS003)

in partial fulfillment for the award of the degree of

## MASTER OF ENGINEERING

in

## POWER SYSTEMS ENGINEERING

# M.KUMARASAMY COLLEGE OF ENGINEERING, KARUR - 639113

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**APRIL 2023** 

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## M.KUMARASAMY COLLEGE OF ENGINEERING, KARUR

(An Autonomous Institution, Affiliated to Anna University, Chennai)



#### **BONAFIDE CERTIFICATE**

Certified that this project report "DESIGN AND DEVELOPMENT OF INC-MPPT SWITCHED ZETA CONVERTER FOR SOLAR PV ARRAYS" is the bonafide work of "KATHIRAVAN G(927621MPS003)" who carried out the project work during the academic year 2022-2023 under my supervision. Certified further, that to the best of my knowledge the work reported here in does not form part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

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Submitted for Project Work Phase II viva voce examination held on 11.64.23

ii





# PHOTO VOLTAIC BASED POWER QUALITY IMPROVEMENT AND HARMONIC REDUCTION IN MICROGRID USING NEURO FUZZY LOGIC CONTROLLER

#### PHASE II REPORT

## Submitted by MYTHILI R (927621MPS004)

in partial fulfillment for the award of the degree of

#### MASTER OF ENGINEERING

IN

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Certified that this project report "PHOTO VOLTAIC BASED POWER QUALITY IMPROVEMENT AND HARMONIC REDUCTION IN MICROGRID USING NEURO FUZZY LOGIC CONTROLLER" is the bonafide work of R.MYTHILI (927621MPS004) who carried out the major project work during the academic year (2022-2023) under my supervision. Certified further, that to the best of my knowledge the work reported here in does not form part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

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Submitted for Project Work Phase II (19PPSP103L) viva voce examination held on 11-04-23

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# CONTROL AND OPTIMIZATION OF BI-DIRECTIONAL DC-DC CONVERTER INTEGRATED WITH WIND ENERGY SOURCE

A PROJECT (PHASE II) REPORT

Submitted by

## **REVATHI M (21MPS006)**

In partial fulfillment for the award of the degree of

## **MASTER OF ENGINEERING**

in in

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## M.KUMARASAMY COLLEGE OF ENGINEERING, KARUR-639113

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# M.KUMARASAMY COLLEGE OF ENGINEERING, KARUR

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# FUZZY LOGIC CONTROLLED CASCADED H-BRIDGE MULTILEVEL INVERTER

## PHASE II REPORT

## Submitted by

# SANTHOSH KUMAR K (927621MPS007)

In partial full fillment for the award of the degree of

# MASTER OF ENGINEERING

in

# **POWER SYSTEM ENGINEERING**

M.KUMARASAMY COLLEGE OF ENGINEERING KARUR-639113 (An Autonomous Institution, Affiliated to Anna University, Chennai)

**APRIL 2023** 



## **BONAFIDE CERTIFICATE**

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## PERFORMANCE ANALYSIS HARMONIC REDUCED MODIFIED PUC MULTILEVEL INVERTER

A Project (Phase-II) Report

Submitted by

### **USHA P (21MPS008)**

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# M.KUMARASAMY COLLEGE OF ENGINEERING KARUR - 639113

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**APRIL 2023** 

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