

Contents



1. Testing and Calibration of Phasor Measurement Units (PMU) K. S. Meera and Kaliappan Perumal	01
2. Power System Reliability in Distributed Generation Environment: A Review Gousia Sultana and B. K. Keshavan	13
3. Genetic Algorithm Based Fault Locator for Transmission Lines P. P. Bedekar and S. R. Bhide	19
4. Artificial Bee Colony (ABC) Algorithm based Transmission Expansion Planning with Security Constraints Manisha D. Khardennis, Sujit B. Tembhare and V. N. Pande	27
5. Comparison between Wavelet Packet Transform and M-band Wavelet Packet Transform for Identification of Power Quality Disturbances Pashmi Nitin Kumawat, Dinesh Kumar Verma and Naimish Zaveri	37
6. On the Enhancement of Fault Ride through Capability of Wind Farms M. P. Bhawalkar, N. Gopalakrishnan, Y. P. Nerkar	47
7. Parametric Analysis of the Bidirectional Soft Switching DC/DC Converter for the Proton Exchange Membrane Fuel Cell Hybrid Electric Vehicle Bandi Mallikarjuna Reddy	61
8. Solutions for Voltage SAG in a Doubly Fed Induction Generator Based Wind Turbine: A Review M. Rajvikram	73
9. Novel Model Predictive Current Controller for Grid Connected Inverters in a Smart-Grid Environment N. S. Suresh and S. Arul Daniel	79
10. A Novel Methodology of IoT Implementation in Energy Management M. Rajvikram, C. Gopinath, S. Ramkumar and S. Leoponraj	85

Contents

11. Development of a Self-Powered Temperature Monitoring Wireless Node for Transmission Lines for Smart Grid Application
Atulya Mishra and J. Sundara Rajan 93
12. Performance Evaluation of VSC-HVDC Link for Varying AC System Strengths
J. Sreedevi, V. Anuradha, Premila Manohar and R.S. Shivakumara Aradhya..... 105

© CENTRAL POWER RESEARCH INSTITUTE, 2018

Whilst every effort is made by the CPRI to see that no libellous or unlawful; inaccurate or misleading data, opinion or statement appears in this journal, it is make clear that the data and the opinions appearing in the papers herein are purely the responsibility of the contributors only and not of CPRI.

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, without permission of CPRI.

Co-Published by Informatics Publishing Limited, Bangalore - 560004.