

Power Research

-A Journal of CPRI

www.cprijournal.in

“Power Research Journal is now available for free online”



23/4/26
SB



**CENTRAL
POWER
RESEARCH
INSTITUTE**

Contents

1. Investigations on the Failure of Super 304H Grade Final Reheater Tubes of 660 MW Supercritical Boiler <i>R. K. Kumar , D. Laxman Rao</i>	1-11
2. Analysis for Efficiency Enhancement of Solar PV Modules using Thermoelectric Generators and Matlab-Simulated Ultra-Low Voltage Boost Converter <i>Amruta Kattimani, R. Hemavathi, K. Jeykishan Kumar</i>	13-20
3. Securing RTU Communications in SCADA Systems: A Validation Approach based on IEC 62351 Standards <i>J. Dinesh, Shailesh Kapoor, Shivendra Sinha, V. Shivakumar, M. Pradish</i>	21-30
4. Hybrid Enhancement of Solar PV Efficiency using Thermoelectric Generators and Ultra-Low Voltage Boost Converter <i>Amruta Kattimani, R. Hemavathi, K. Jeykishan Kumar</i>	31-40
5. Assessment of Compliance of Smart Meters for Smart Distribution System Applications for the Indian Scenario <i>S. Sudha, D. Shankar, P. Kaliappan</i>	41-45
6. Evaluating Thermal Retention Performance of a Solar Water Heater: Cooling Time Constant Assessment <i>Akshay Vidhate, Amit Kumar Sharma</i>	47-50
7. A Case Study on the Immunity of Smart Energy Meters to High-Frequency Electromagnetic Interference <i>Shankaramrthy, B. L. Jayadev, D. M. Adarsh</i>	51-56
8. Evaluation of Seismic Performance of Current Transformers <i>Yamini Gupta, D. Nagesh Babu, R. Panneer Selvam</i>	57-61
9. Experimental Validation of Tower Gantry Structure – A First for India <i>Durgesh Kumar Yadav, K. Vijaya Kumar, Vikas Singh Rajput, M. Selvaraj</i>	63-66
10. Case Study on Steady State Operation, Testing, Evaluation, and Analysis of New Test Method for Frost-Free Refrigerators <i>Mohit Padwal</i>	67-75

© CENTRAL POWER RESEARCH INSTITUTE, 2025

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.