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From the President's Desk

Samvaad

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Cover story

Water Management in Thermal Power Stations promote **Energy Efficiency**

Thermal power generation is a water intensive industry and thermal power plants in India are some of the largest consumers of water in the world. Most of the thermal power plants uses water from dams constructed about 20 km to 50 km away from the power station which increases specific energy consumption of the plants.

22

Face to Face



Smart Grid is a continuous journey and its trajectory will be directed by urgency of the challenges being faced by the utilities: Mr Vikram Gandotra, Chairman, IEEMA Smart Grid Division



This new space in the IEEMA Journal will incorporate recent important appointments in the

28

IEEMA Activities

power and related sectors

Event

Workshop on'Technical and **Testing Challenges for Smart** Meters'

The Central Board of Irrigation & Power and National Smart Grid Mission organised Workshop on Technical and Testing Challenges for Smart Meters on 2 - 3 November 2017 at Conference Hall of Central Board of Irrigation & Power, Malcha Marg, Chanakyapuri, New Delhi.

Product showcase



Water Management in Thermal Power Stations

Promote Energy Efficiency

In Focus

Power Factor Correction in Presence of Nonlinear Load



Inductive loads need both ad power and reactive power for # functioning. Utilities aim to M Active Power needs of loads expect the reactive power neg to be met from reactive po installations at consumer end.

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In depth

Energy Efficiency measures in Distribution Network

Thermal power generation water intensive industry and the power plants in India are some the largest consumers of wall the world.





Insiaht

Lightning Protection, Surge **Protection & Earthing**



Surge Protective Devices intended to limit surge voltages and divert surge current and there by protect the equipment and the installation from insulation failures and insulation degradation. SPD contains at least one nonlinear component that is connected in parallel to the lines where the surge voltage needs to be limited.



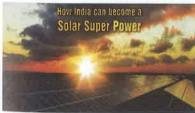
Interview

We are strategizing for long-term growth through cost rationalization with efficient improvements and innovations: Mr Ashish Mangal



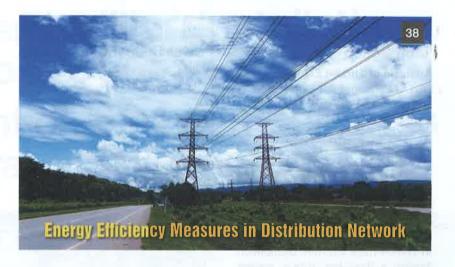
Strategy

How India can become a Solar Super Power



With the right policies to place India can easily become a "Solar Super Power

There is a "Green Energy Revolution" underway in India that can increase prosperity for millions of poor families by harnessing the abundant and clean energy of the sun. With the right policies in place India can easily become a world leader in solar energy.





Opinion

Changes in Automotive Industry: Opportunity for **Electrical Manufacturers**

An Announcement by the Hon. Minister for Surface Transport Mr. Nitin Gadkari in September 2017 has caused a turmoil in the Automotive industry in India. Government of India has taken an ambitious target of totally replacing conventional vehicles using IC Combustion) Engines by Electrical Vehicles (EV) by 2030that is sustainable and totally inexhaustible. Most people are aware of photovoltaics (PV), and that solar panels can be used to generate electricity and produce hot water. Now experts have developed techniques to convert sunlight into "Solar Fuels."



Opinion

Design and Implementation of a Sensorless Vector Controlled **Industrial PMSM Drive**





Guest Article

Energy Solutions Magnet Wire Coatings with High Level On Corona Resistance



Guest Article

Design and Analysis Of Brushless DC Motor With Special Stator Core Using Soft Magnetic Composite Core For **Battery Vehicles**



Expert Speak

Emerging Trends in Electric Rotating Machines Refurbishment Industry



Special Properties of Key Insulating Materials and their Evaluation Techniques

Electric motors are the workhorses of industries. Numbers of processes in the industries depend on electric motors. Production outputs of the industries require continuous running of processes and the equipment therein used for the processes.

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Tech Space

Analysis of Three-LEG VSC Based DSTATCOM and A T-Connected Transformer For Power Quality Improvement



In Three-Phase four-wire distribution system a three-leg voltage source converter (VSC) is proposed for power quality improvement which acts as a distribution static compensator (DSTATCOM) with T-connected transformer.

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Tech Space

IEC Type 1 & Type 2 Co-Ordination

IEC 60947-4-1 provides recommendation for the manufacturers of induction motor starters to select the components and cover co-ordination in a specified manner. This paper discusses this recommendation visa-vis users' dilemma in selection and maintenance of the starter. In my opinion, in certain aspects, this IEC recommendation falls short of the expectation on clarity and significance.

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Advertisements Incharge Ms Vidya Chikhale Statistics & Data

Incharge Ms Chitra Tamhan Designed by Reflections

Incharge Mr Nmed Ranade

nd Ranade Processed India Printing

Regd Office - Mumbai

501, Kakad Chambers, 132, Dr A Besant Ro Worli, Mumbai 400 018.

Phones: +91(0) 22 24930532 / 6528 Fax: +91(0) 22 2493 2705 Email: mumbai@ieema.org

Corporate Office - New Delhi

Rishyamook Building, First floor, 85 A, Panchkuian Road, New Delhi 110001, Phones: +91 (0) 11-23363013, 14, 16 Fax: +91 (0) 11-23363015 Email: delhi@ieema.org

Branch Office - Bengaluru

204, Swiss Complex, 33, Race Course Road, Bengaluru 560 001. Phones: +91 (0) 80 2220 1316 / 1318

Fax: +91 (0) 80 220 1317 Email: bangalore@ieema.org

Branch Office - Kolkata

503 A, Oswal Chambers, • 2, Church Lane, Kolkata 700 001. Phones: +91 (0) 33 2213 1326 Fax: +91 (0) 33 2213 1326 Email: kolkata@leema.org

Website: www.jeem

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Representatives:

Guwahati (Assam) - Nilankha Chaliha Email: nilankha.chaliha@ieema.org Mobile: +91 9706389965

Lucknow (U.P. and Uttarakhand) -Ajuj Kumar Chaturvedi Email: anuj.chaturvedi@ieema.org Mobile: +91 9839603195

Chandigarh (Punjab & Haryana) Bharti Bisht Email: bharti.bisht@ieema.org

Mobile: +91 9888208880

Jaipur (Rajasthan) Devesh Vyas Email: devesh.vyas@leema.org Mobile: +91 8955093854

Bhubaneshwar (Odisha) Smruti Ranjan Samantaray Email: smrutiranjan.samantaray@ieema.org Mobile: +91 9437189920

Hyderabad (Andhra Pradesh) Jesse A Inaparthi

Jesse A Inaparthi Email: jesse.inaparthi@ieema.org Mobile: +91 9949235153

Srinagar (Jammu & Kashmir) Mohammad Irfan Parray Email: irfan.parray@ieema.org Mobile: +91 9858455509

For subscription queries write to: chitra.tamhankar@leema.org

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