

the leading electrical & electronics monthly

ieema journal

Volume 8 Issue No. 9 May 2017 CIN U99999MH970GAP014629
 Official Organ of Indian Electrical & Electronics Manufacturers' Association
 Member: Audit Bureau of Circulation & The Indian Newspaper Society

6

From the President's Desk

7

Samvaad

14

Face to Face



Mr Vijay Karia, Chairman, ELECRAMA 2018 speaks to IEEMA Journal about the 12th edition of ELECRAMA 2018 which is aimed to give new direction and new meaning to 'Electricity'

26

Appointments

This new space in the IEEMA Journal will incorporate recent important appointments in the power and related sectors.



30

Cover story

Metering India 2017

The 7th edition of Metering India seminar was flagged off on April 6 at Hotel Le Meridian, New Delhi. The chief guest of the Conference were Governor of Punjab, Shri VP Singh Badnore. Other dignitaries present on the occasion were Shri RK Verma, Chairperson CEA, Ms. Ritu Maheshwari, CEO RECTPCL, Mr. Richard Schomberg, Chairperson – System Committee, Smart Energy, IEC.

42

IEEMA Event

ELECRAMA 2018 announcement



44

Analysis

SWOC analysis of smart energy metering system

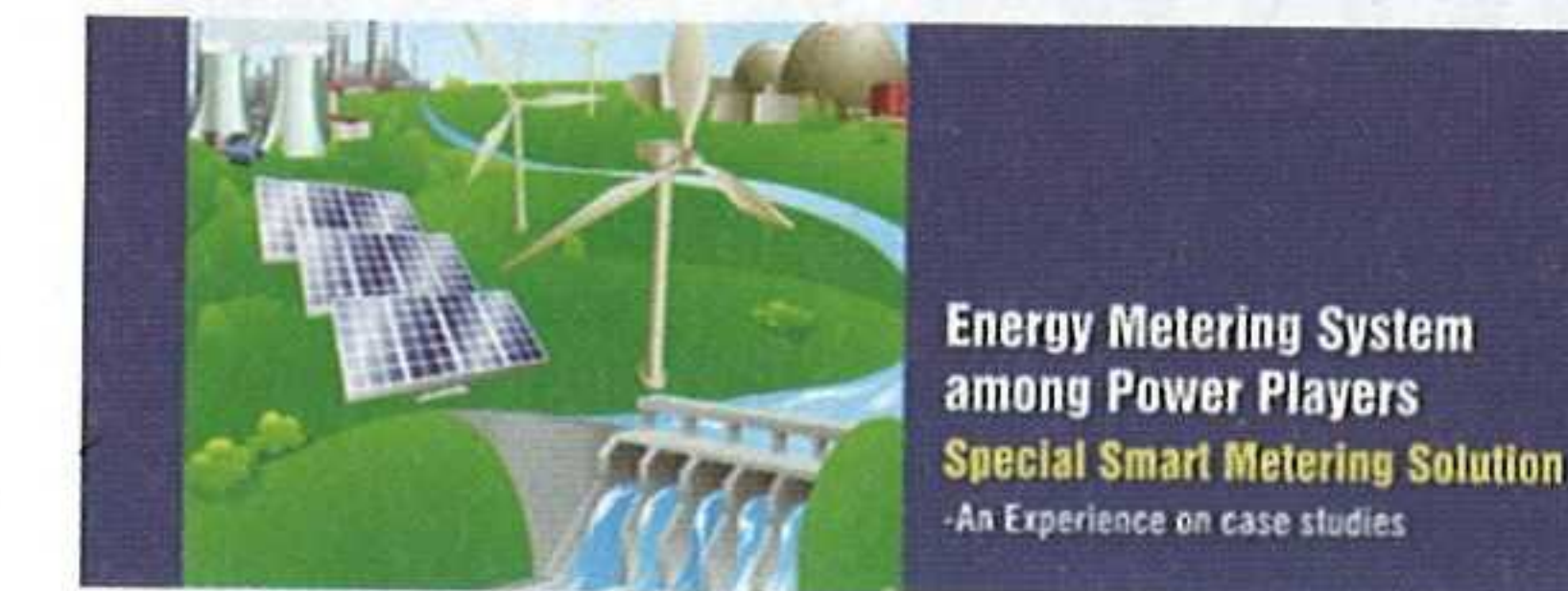


Smart meters are advanced energy meters which can measure the usage of electrical energy along with extra information in comparison to conventional energy meters. Design of smart meters based on the needs of the utilities as well as the customers. A variety of features and technologies are incorporated with smart meters.

50

Case Study

Energy metering system among power players – special smart metering solution

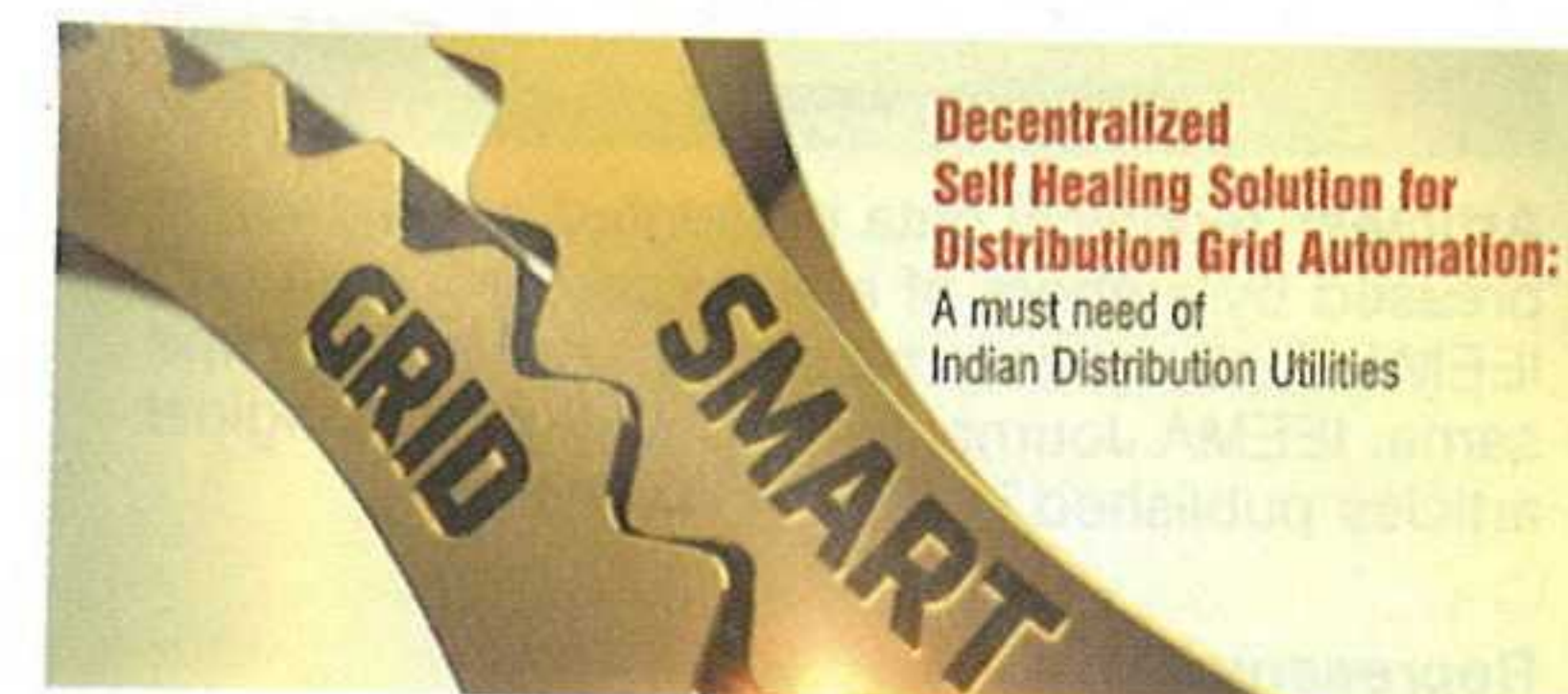


At present the integrated power system are getting involved with diversified business in energy sector and in need of quality, reliable and secured supply system. The energy players sometimes face difficulties on the calculation of the energy delivered, consumed or transacted in the system due to lack of proper agreement and metering schemes.

56

Distribution Management

Energy conservation through NEW Decentralized self healing solution for Distribution Grid Automation: A must need of Indian Distribution Utilities



Major faults and outages on power distribution system have a significant economic and social impact and the availability & reliability of supply becomes a more and more important issue. Hence outage times should be as short as possible.

62

Expert Speak

- Journey towards sustainable growth with energy security, and global tracking framework: case of hybrid project

67

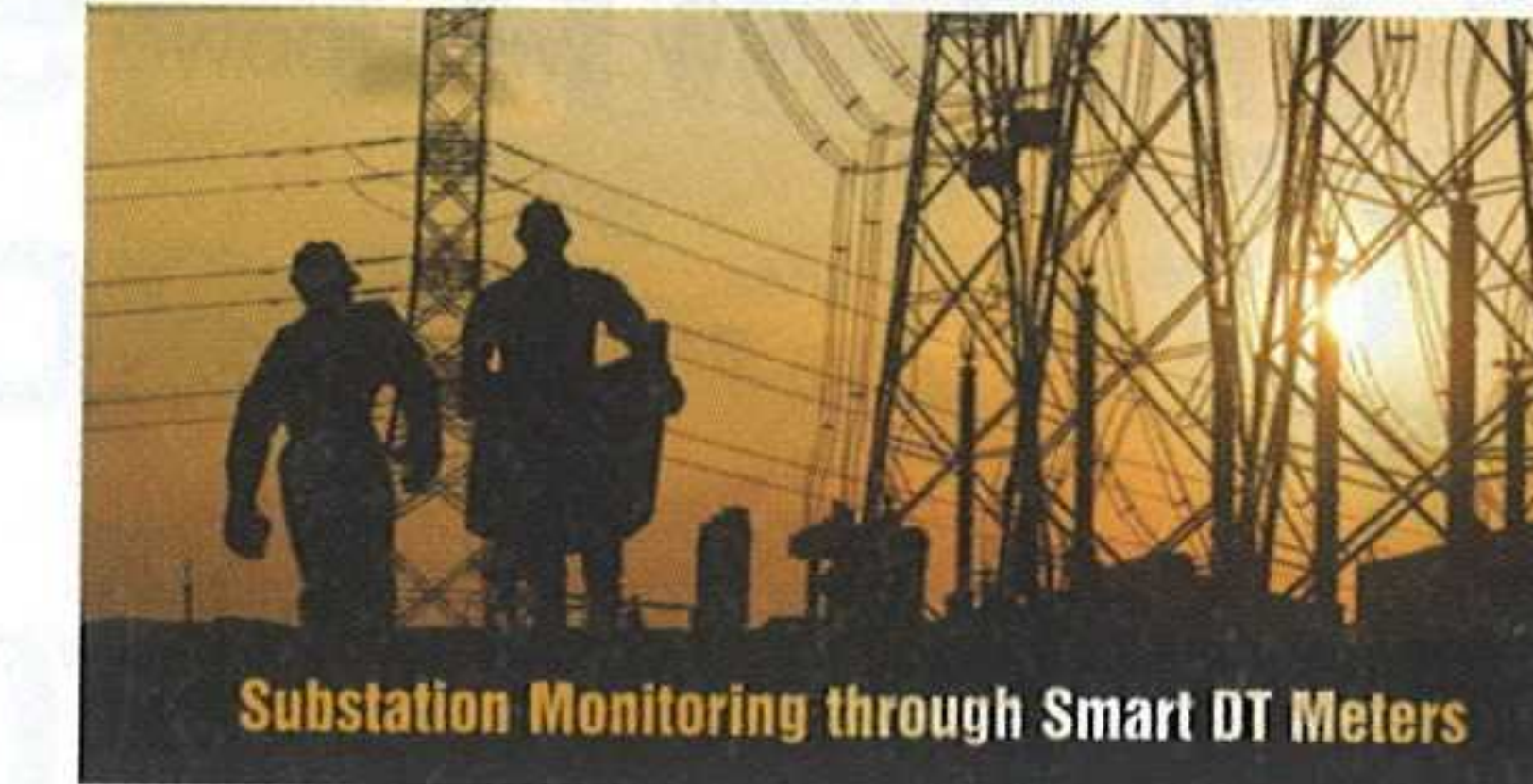
Expert Speak

- Meter Data Analytics and Management

72

Featured

Substation Monitoring Through Smart DT Meters

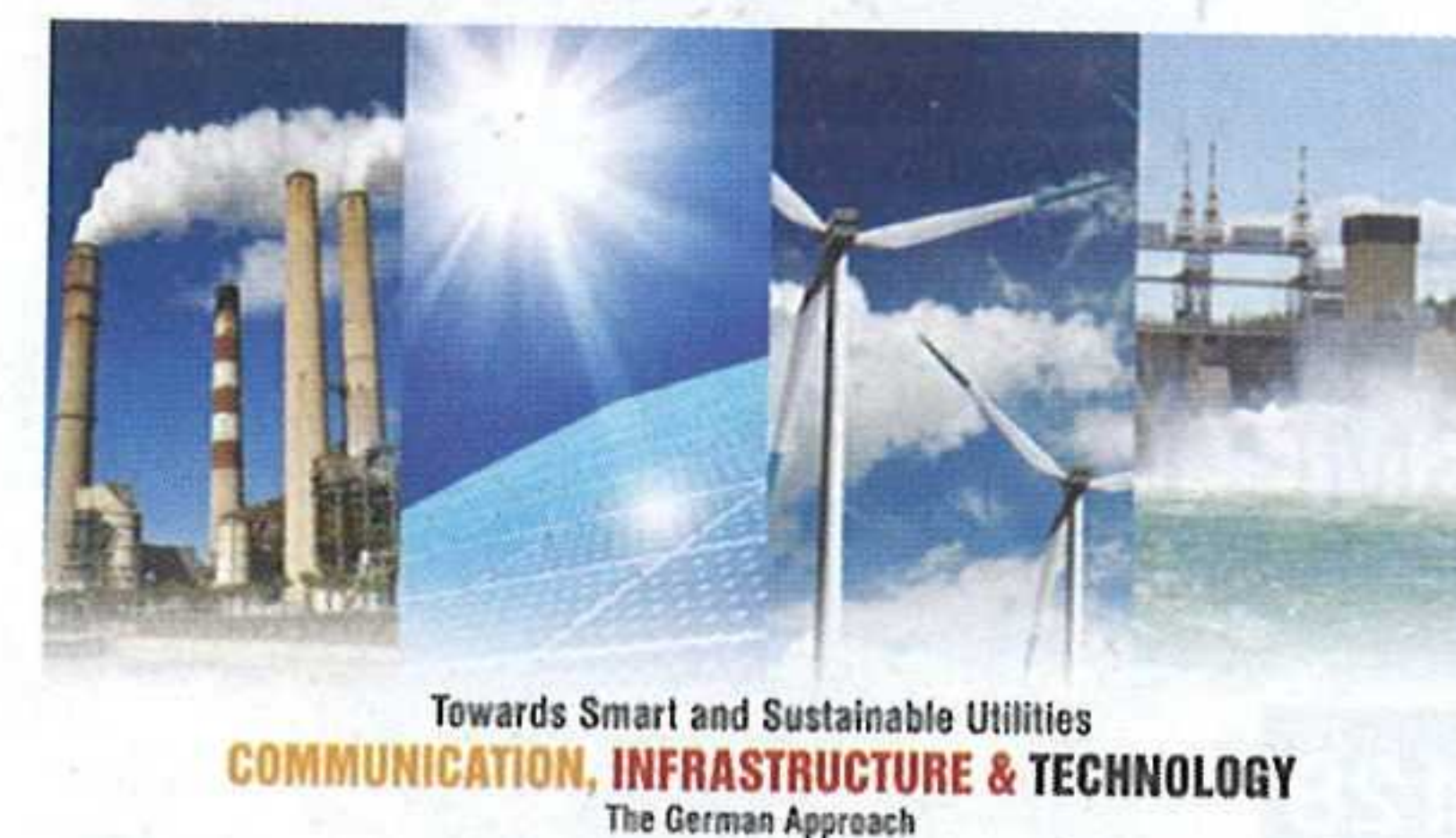


Introduction with IS 16444 in place, we are in the new era of smart meters. With smart meters the power and metering industry is about to get a massive revamp for consumer metering. The specification for CT operated consumer metering are positioned to be finalized in short time.

74

Guest Article

Towards Smart and Sustainable Utilities



Communication, Infrastructure And Technology- The German Approach

One of the most important trends of our time is Digitization. Digitization is also the top theme of the energy Industry and Power utilities, of course, it is one of the basic requirements for the implementation of an intelligent electricity grid to increase the use of renewable energies and make the production and consumption more.

81

In Depth

Automating the Governance of Single Phase Energy Meter by Merging Cryptography and IOT

86

In Focus

Challenges in Implementation of Smart Grid and Smart Metering – The Indian Context

To make electric utilities sustainable, it is necessary to make them smart to reduce AT & C losses. And to reduce AT & C losses, it is necessary to implement the smart grid and smart metering.

91

Innovation

6LowPan - Key to Sustainable Smartness



6LowPAN as a standard has been very effectively instrumental in addressing the growing need and numbers of cloud connected nodes and their Low Power PAN network. Especially in domains like Smart meter and Smart cities where the number of nodes will be very high along with a critical data and control exchange happening in regular intervals, 6LowPAN appears to be the key to connect all the nodes.

94

Opinion

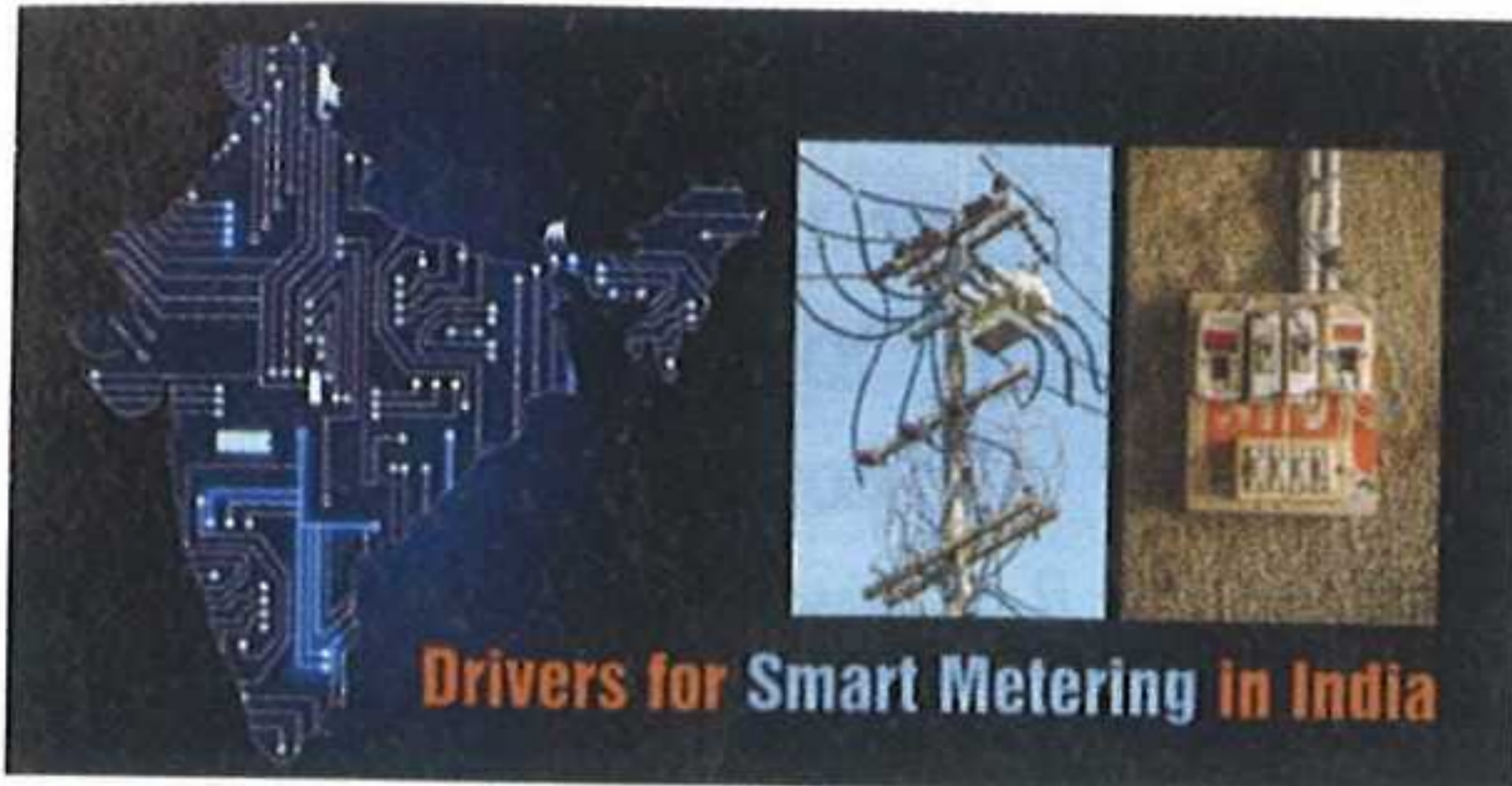
Before Leaping into the Smart Grid...

A smart grid is the integration of information and communications technology into electric transmission and distribution networks. Today, the electricity supply industry is suffering with an unprecedented array of challenges, ranging from demand-supply gap to rising power costs.

98

Smart Metering

Drivers For Smart Metering In India



Drivers for Smart Metering In India

In India the main constraints for optimum energy management system are energy pilferage, tampered meters, and inefficient billing system. Most of this can be rectified by using smart energy meters.

102

Solutions

Present Traction Metering Schemes– Issues and Solutions



Present Traction Metering Schemes Issues and Solutions
(An experience sharing study)

Traction system in transport sector has been considered as the mainstay due to its various advantageous factors like better performance, economical maintenance cost and mass group transfer.

109

Technology

Metering beyond utilities: Energy Metering in Data Centers



Metering beyond utilities
Energy Metering in Data Centers

116

International News

- China, India lead Asia-Pacific energy M&A deals in 2016
- Sembcorp's renewable energy arm wins 250 MW wind power project in India

120

National News

- Government electrifies over 13,000 villages out of 18,452
- Power Purchase Agreement for Rewa Ultra Mega Solar Power Project signed

124

Corporate News

- BHEL commissions 2 units at Maharashtra thermal power project
- Cabinet approves the "Signing and Ratification of MoU for Establishment of the BIMSTEC Grid Interconnection"

126

SME TALK

128

Power Scenario

Global Scenario
Indian Scenario

130

IEEMA Database

Basic Prices & Indices
Production Statistics

132

ERDA News

133

Index to Advertisers

Editorial Board

Advisory Committee

Founder Chairman
Mr R G Keswani

Chairman
Mr Sanjeev Sardana

Members

Mr Sunil Misra
Mr Naveen Kumar
Mr Mustafa Wajid
Mr Vikram Gandotra
Mr Vijay Karia
Mr Sunil Singhvi

Sub Editor

Ms Shalini Singh

Advertisements Incharge

Ms Vidya Chikhale

Circulation Incharge

Ms Chitra Tamhankar

Statistics & Data Incharge

Mr Ninad Ranade

Designed by:

Reflections

Processed at:

India Printing Works

Regd Office - Mumbai

501, Kakad Chambers, 132, Dr A Besant Road, 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@ieema.org

Website: www.ieema.in

Articles: Technical data presented and views expressed by authors of articles are their own and IEEMA does not assume any responsibility for the same. IEEMA Journal owns copyright for original articles published in IEEMA Journal.

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@ieema.org
Mobile: +91 8955093854

Bhubaneswar (Odisha)

Smruti Ranjan Samantaray
Email: smrutiranjana.samantaray@ieema.org
Mobile: +91 9437189920

Hyderabad (Andhra Pradesh)

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@ieema.org