

the leading electrical & electronics monthly

# ieema journal

Volume 9 Issue No. 12 August 2018 CIN U99999MH1970GAP014629  
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

## Appointments



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

20

## Cover Story

### DISCOM Report Card Gujarat Again Tops the Annual Ranking

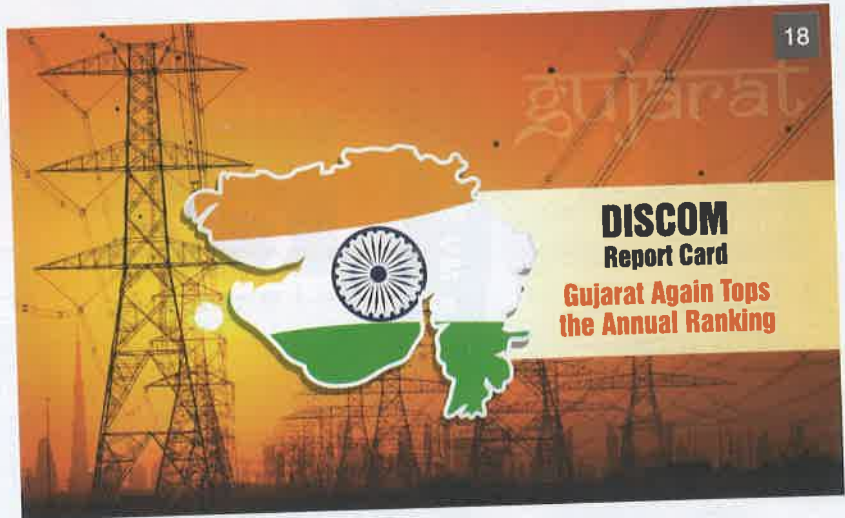
For the sixth year in a row, the power distribution companies (discoms) of Gujarat have topped the annual ranking procedure performed by the Union Ministry of Power. At the same time, four out of five discoms of Uttar Pradesh (UP) have not moved out of the lowest grade, said the report on 'State Distribution Utilities Annual Integrated Rating' for 2016-17.

46

## Interaction



**Elevator Industry is expected to grow at the rate of 9% CAGR:**  
**Mr Manish Sikka**



48

## Solution

### The Digital Enterprise is already a Reality!



Manufacturing industry in India has gone through various phases of development over the period of time and promises to be one of the high growth sectors in the coming years. The Make in India initiative aims to boost the contribution of the manufacturing sector from 15% to 25% of GDP, in the near future. In order to support this growth, India will need an ecosystem comprising tier 1, tier 2, as well as tier 3 suppliers, with a high level of efficiency, flexibility, and quality focus.

52

## IEEMA Event

### IEEMA organizes Electrical Fire Safety Conclave for integrated solutions on fire protection and security



Mobile substations unit (MSU) are fully equipped electrical substations mounted on semitrailers. The most important advantages of these units are their rapid integration into the network and the ability to reuse them in different places.

55

**International Presence**

**IEEMA Business Delegation to Asian Utility Week**

Aligning with Hon'ble Minister of Commerce Shri Suresh Prabhu's vision to boost Indian exports by identifying new markets, IEEMA has started taking business delegation to identified market, in the Series of this Activity, Thailand was identified during the International Business Division meeting and it was decided to take a business delegation to Thailand.



55

57

**Announcement**

**METERING INDIA**  
2019 ● ● ●

*Widening Horizons...*  
25th and 26th April 2019, New Delhi

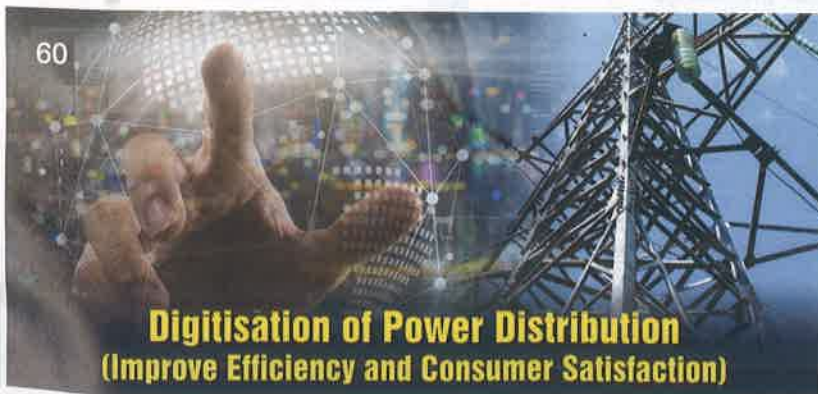
IEEMA Meter division proudly announces the 8th edition of conference "METERING INDIA" which is the benchmark event of the Indian Energy Metering Industry. METERING INDIA, powered by IEEMA.

60

**Expert Speak**

**Digitisation of Power Distribution – (improve efficiency and consumer satisfaction)**

Even though the aggregate technical and commercial losses in the distribution segment have declined over the past few years, these losses vary widely across states and continue pose a challenge for the discoms.



60

**Digitisation of Power Distribution**  
**(Improve Efficiency and Consumer Satisfaction)**

64

**Indepth**

**Innovative Technology Permits Predictive Maintenance on a High Voltage Power Network**



This paper covers innovative technologies that permits predictive maintenance to be done on a high voltage power network. Results obtained from performing condition monitoring testing on high voltage equipment have prevent numerous failures. Many of these failures would have occurred and cause extensive and extended outages in the City of Johannesburg.

72

**Index to Advertisers**

73

**Opinion**

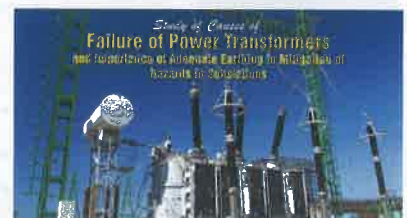
**Low Voltage electrical safety systems for Lifts & Elevators**

Commonly used safety measure: "Earthed Equipotentialisation & Automatic Disconnection of Supply". Inspection and verification of L.V electrical system as per IEC 60364-6

75

**In Focus**

**Study of Causes of Failure of Power Transformers and Importance of Adequate Earthing in Mitigation of Hazards in Substations**



The transformer, being a key element in the transmission and distribution of electrical energy, improving its reliability is of utmost importance. System abnormalities, loading, switching and ambient condition normally contributes towards accelerated aging and sudden failure.



80

**International News**

- New York Begins Wave toward 2,400 MW of Offshore Wind
- Businesses risk \$1m fines under European Energy Efficiency Directive

82

**National News**

- Global corporate solar funding at \$5.3 billion in first half of the year
- Peak power deficit in April-June at 0.7 per cent: Minister R K Singh

84

**Corporate News**

- HARTING expands production capacity in India
- GP Global & Spain's CEPSA partner to make marine lubricants in India

86

**Power Scenario**

Global Scenario  
Indian Scenario

88

**IEEMA Database**

Basic Prices & Indices  
Production Statistics

90

**IEEMA Activities**

91

**Interactive Session**

BIS - Industry Interactive Meet

92

**ERDA News**

94

**Product Showcase**

98

**Shocks & Sparks**



91

**Editorial Board**

Advisory Committee	
<b>Founder Chairman</b> Mr R G Keswani	<b>Chairman</b> Mr Shreegopal Kabra
<b>Members</b> Mr Sunil Misra Mr Naveen Kumar Mr Vikram Gandotra Mr. Mustafa Wajid Mr. Purnendu Chaubey Mr. Mithul Thakkar	<b>Sub Editor</b> Ms Shalini Singh
<b>Advertisements Incharge</b> Mr Gautam Sakhalkar	<b>Circulation Incharge</b> Ms Chitra Tamhankar
<b>Statistics &amp; Data Incharge</b> Mr Ninad Ranade	<b>Designed by:</b> 1 Reflections <b>Processed at:</b> 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: gautam.sakhalkar@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)** - Nilanka Chaliha  
Email: nilanka.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 9886208880

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

**Bhubaneswar (Odisha)**  
Smruti Ranjan Samantaray  
Email: smrutiranjansamantaray@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](mailto:chitra.tamhankar@ieema.org)