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# ieema journal

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10

## From the President's Desk

11

## Samvaad

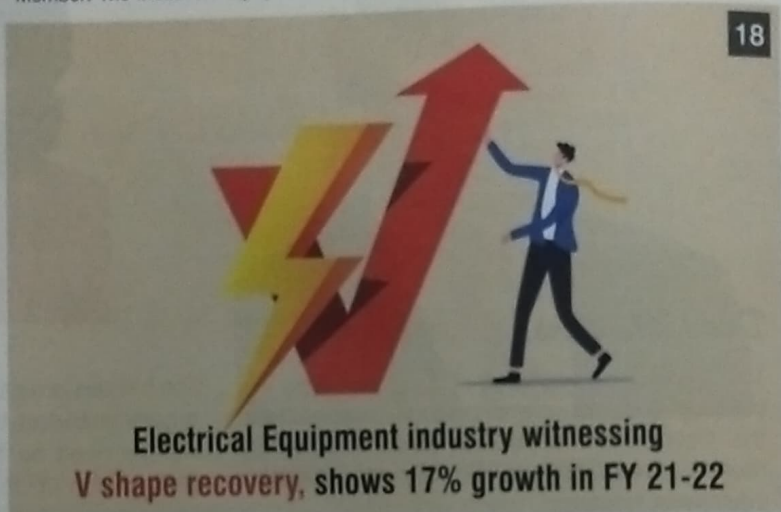
18

## Cover Story

**Electrical Equipment industry witnessing V shape recovery, shows 17% growth in FY 21-22**

Power sector is the most critical components of infrastructure and is a backbone of any economy. Development in power sector reflects growth of an economy.

India's power sector is robust and is diversified. While India has been using conventional sources of energy for generating electricity, it is fast moving towards unconventional sources and renewal sources of electricity.



18

27

## Special Report

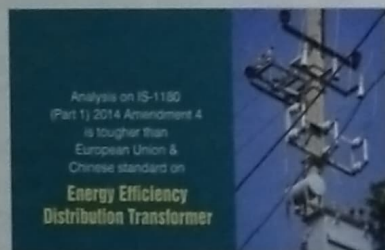
**3rd Edition of E3 emphasised on Energy Transition, Smart Cities and future business opportunities**

The 3rd edition of IEEMA Eastern Region flagship event - Empower Energise East - E3 kicked off with a bang at Biswa Bangla Convention Centre, Kolkata.

32

## Analysis

**Energy Efficiency Distribution Transformer**



This is the article where author tries to compare & analyse the standard maintained by different advanced countries for manufacturing of distribution transformers for Tier/Level-1 & 2. More particularly here author compares all ratings of transformer minutely among European Standard, Bureau of Indian Standard & Chinese Standard & presented in graphical form after converting to 50% & 100% loss. Loss limit fixed by considering different parameter/matrix.

## 3rd Edition of E3 emphasised on Energy Transition, Smart Cities and future business opportunities 27



For suggestions and feedback please write to us on [shalini.singh@ieema.org](mailto:shalini.singh@ieema.org)

38

**Case Study**

**Protection of Transmission Line Towers during Landslides**



North East Transmission Company (NETC) is entrusted with construction and maintenance of its 662.8 Km, 400 kV Double Circuit transmission line in the difficult hilly & dense forest terrain in the states of Tripura

43

**Expert Speak**

**Degradation of Magnetic Properties in CRGO used for Transformers**

The failures that most frequently arise in practice may be categorized broadly as below, although to a large extent the different kinds of failure often influence each other

50

**Guest Article**

**Adaptive Environmental Friendly Ester Fluids Technology and Usage for Transformer Applications**

Transformers are one of the most important equipments in power system network.

50

Guest Article

Adaptive Environmental Friendly Ester Fluids Technology and Usage for Transformer Applications

53

**Insight**

**Indian Standards on Distribution Transformers**



India's power sector is one of the most diversified in the world. The phenomenal growth of power system has put tremendous responsibilities on the transformer industry to supply reliable and cost-effective transformers.

41

**Opinion**

**Wish List on Distribution Transformer**



This Article captioned as "KNOW YOUR TRANSFORMER" has been attempted by the principal author on the analogy of KYC (Know Your Customer) by various banks.

68

**Overview**

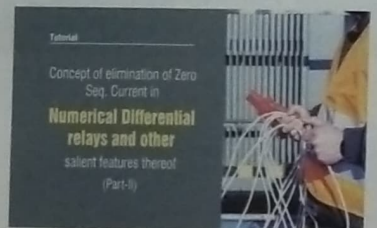
**Causes of Failure of DT & Analysis of Adequate Earthing (Grounding), Harmonics & Integration with Renewable Power**

India is a developing country and electricity play vital role in the development of India. Generation of electric power is important, but role of distribution of electric power for providing reliable power cannot be ignored. In the distribution system distribution transformer plays an important role.

80

**Tutorial**

**Concept of elimination of Zero Seq. Current in Numerical Differential relays and other salient features thereof (Part-II)**



In continuation to the part-I of this article was published in the IEEMA Journal of May 2022 issue, which was written with a view to highlight the prevention of Zero sequence current from the Differential protection relay circuit and its importance in the most vital protection of the Power transformers the "Differential protection" to the Protection/Testing & commissioning Engineers.

85

**Events and Eventualities Practical Field Technical Queries On Transformer's Abnormal Situation (Part-17)**

Last few months, the case studies on transformer's abnormal situation was getting published under the section of event and eventual series.

97

**ERDA**

99

**International News**

- GE Steam Power signs \$165 mn contract with BHEL
- Angola to become Germany's first supplier of green hydrogen
- Mitsubishi Heavy Industries among investors in hydrogen startup
- Vattenfall and Air Liquide sign 115MW PPA for offshore wind
- ACWA Power consortium to develop 1.1GW wind project in Egypt

101

**National News**

- \$223BN Investment Needed for India to Meet 2030 Wind and Solar Goals
- New study from AEEE lays out a 'Roadmap for Demand Flexibility in India' and effective low carbon strategies for DISCOMs to manage peak demand

103

**Corporate News**

- NTPC crosses the 2GW RE Capacity
- Tata Power installs 150 clean energy-powered EV charging stations across Mumbai
- Essar Power strengthens its commitment towards HSE
- Azure Power ties up with India's Premier Energies for 600 MW modules

105

**Product Showcase**

106

**IEEMA Database**

Basic Prices & Indices  
Production Statistics

110

**Advt Index**

112

**Sparks Sans Shocks**

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68

Overview

**Causes of Failure of DT**

& Analysis of Adequate Earthing (Grounding), Harmonics & Integration with Renewable Power



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