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# ieema journal

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 Official Organ of Indian Electrical & Electronics Manufacturers' Association  
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**From the President's Desk**

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**Cover Story**  
 The Countdown begins  
 The complete power distribution show

Distribuelec India's only Exhibition on Hi-Tech Power Distribution, showcasing products, technologies and services from 220V till 33KV in traditional electrical equipment like transformers, cables, capacitors, switchgears, meters, insulators, conductors and new age technologies in distribution automation & control systems.

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**Special Feature**  
 IEEMA announces ELECRAMA 2023 space booking open from May 16

IEEMA announces ELECRAMA 2023



The Indian Electrical and Electronics Manufacturers Association announced space booking commencement of its flagship event the 15th edition of ELECRAMA 2023 from May 16th, 2022 in a scintillating event named as UmangUtsavheld in Taj Lands End in Mumbai.

The Countdown begins...  
**12** **The complete power distribution show**

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**ieema WIP Initiative**  
**Empowering Women to Nurture their Emotional-Selves**  
 Amisha Desai MPS, LMFT, is the Founder and CEO of the mental health practice Self Empowering Journeys in Montville, NJ. She was born and raised in India and immigrated to the USA in her mid-twenties.

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**Policy Updates**  
**FTP 2015-2020 - Extension of Integrated Good and Service Tax (IGST) and Compensation cess exemption**

The existing Foreign Trade Policy (FTP), 2015-20, extended the Integrated Good and Service Tax (IGST) and Compensation cess exemption under Advance Authorisation, EPCG and EOU scheme up to 30.06.2022.

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**Interaction**  
**Switchgear play pivotal role ensuring networks operate with minimum faults in grid: Mr Nitin Rastogi**

IEEMA Journal speaks to Mr Nitin Rastogi, Associate Vice President, Sales & Marketing, L.V Component Division, C&S Electric for his insight on the switchgear segment in India...

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**Guest Article**  
**Electric Vehicles and Environment**



Electric vehicles are seen as the best alternative to replace fossil fuels like coal, petrol, diesel and natural gas, which pose a grave danger to environment of the world.

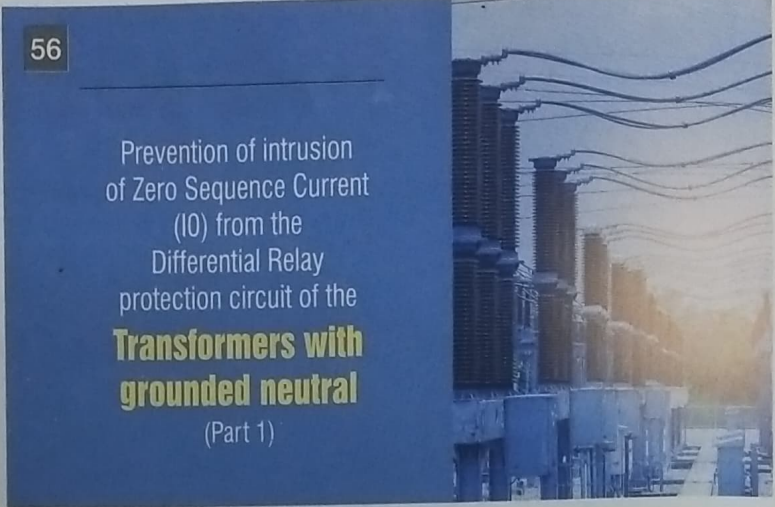
For suggestions and feedback please write to us on [shalini.singh@ieema.org](mailto:shalini.singh@ieema.org)

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**Tutorial**

**Prevention of intrusion of Zero sequence current (I0) from the Differential Relay protection circuit of the Transformers with grounded neutral (Part 1)**

As the name signifies, the Differential protection is based on the current differential of the primary (input) and the secondary (output) currents of a transformer. This is the most vital protection of a transformer categorized as Unit protection covering a specific zone of operation of a transformer from HV CTs to LV CTs.



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Prevention of intrusion of Zero Sequence Current (I0) from the Differential Relay protection circuit of the **Transformers with grounded neutral** (Part 1)

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**Evaluation**

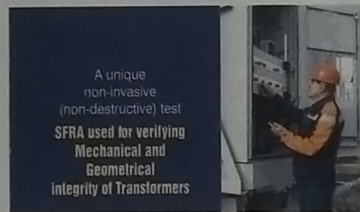
**A Critical Evaluation of Safety, Economic and Power Quality Considerations for Single-Phase Power Consumption and Distribution Systems at 120 and 230 V**

Safety, economic and power quality issues of the worldwide practiced single-phase 120 V and 230 V system levels of power consumption are discussed. Major portion of power consumption in the world is at single-phase 230 V whereas in some countries, it is at 120 V. Consumption of power at 120 V was opted primarily because it was considered to be safer compared to the 230 V system

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**Tech Space**

**Transparent Solar PV Technology- the new horizon in Renewable Energy Systems**

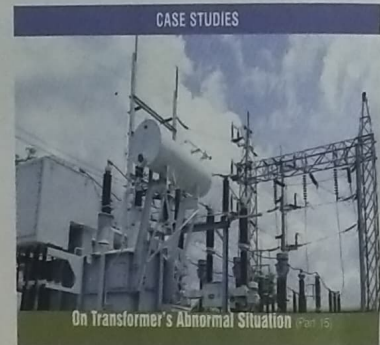


A unique non-invasive (non-destructive) test SFRA used for verifying Mechanical and Geometrical integrity of Transformers

The demand for electric power is increasing exponentially in India from 1362 MW in the year 1947 to 382 GW as of today. This brings out lot of stress on conventional generation particularly coal.

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**Events and Eventualities Case Studies on Transformer's Abnormal Situation (Part-15)**



CASE STUDIES

LAST FEW MONTHS the CASE STUDIES on TRANSFORMER's abnormal situation is getting published under the section of EVENT and EVENTUAL series. Readers especially from field units are accepting this series because of its presentation approach is based on the actual situations, observations, action taken on the subject with recommendations for the future reference.

First FOURTEEN parts of this series had been published during February 2021, March 2021, April 2021, May 2021, June 2021, July 2021 August 2021, September 2021, October 2021, November 2021, January 2022, FEB 2022, MARCH 2022 and APRIL 2022 with response of readers on this subject being in exponential trend.

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A Critical Evaluation of **Safety, Economic and Power Quality Considerations** for Single-Phase Power Consumption and Distribution Systems at 120 and 230 V



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- Electrolyzer PLI to push green hydrogen output
- Govt seeks EoI for setting up a manufacturing zone on pilot basis for power & renewable energy sector
- Stakeholders' consultation meet organised to usher in a new path of energy efficiency solutions

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- NTPC collaborates with Delhi Jal Board to convert waste into energy

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Meeting with Additional Chief Secretary, Energy,  
Government of Uttar Pradesh

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