**REGIONAL SEMINAR ON "DESIGN, ACTIVE REPAIR, CERTIFICATION, TESTING OF DISTRIBUTION TRANSFORMERS AND OTHER RELATED ISSUES" ON 29TH JUNE 2018 AT HOTEL SAROVAR PORTICO, HARIDWAR BYPASS ROAD. NEAR ISBT DEHRADUN, UTTARAKHAND.**

Indian Transformer Manufacturers Association (ITMA) which is an all India body of manufacturers of transformer & its allied products along with International Copper Association India (ICAI), a nonprofit organization promoting Energy Efficiency, Electrical Safety, Power Quality and Renewable Energy are jointly organizing seminars at various parts of the country for spreading awareness amongst the utilities for aligning/adopting their specifications for Distribution Transformers as per the Indian standard IS-1180 Part 1/2014 for uniformity at National Level which has the obvious advantages, besides the BIS certification as per Quality Control Order and Star and Labelling/ Energy Efficiency programme. ITMA and ICA India are committed to extend support to BIS to facilitate in organizing the seminars to create awareness about standardization activity and improvement of standards from time to time and also in association with CEA/BEE/CPRI/ERDA/ERTO to enlighten the gathering on regulations and testing etc. on Distribution Transformers.

ITMA, BIS and ICAI organized a seminar on "Design, Active Repair, Certification, Testing and Reliability of Distribution Transformers and Other Related Issues" on 29th June 2018 at Hotel Sarovar Portico, Haridwar Dehradun Particularly for stakeholders of Uttarakhand, Uttar Pradesh, Chandigarh etc. The seminar was inaugurated by and Shri B.C.K. Mishra, Managing Director, UPCL as a Chief Guest, Shri Atul Kumar Aggarwal, Director (Operation) UPCL as Guest of Honour and all dignitaries of BIS, CEA, CPRI/ERDA/ERTO, UPCL were there to grace the conference as Special Guests. The seminar was a grand success due to active co-operation and participation of our members and other organizations associated with ITMA. During the course of deliberation in the conference various issues concerning BIS certification and test facilities available and to be developed by all the test houses viz CPRI, ERDA ERTO were discussed. Besides, demonstration of repair of Amorphous Metal Distribution (AMD) Transformer by replacing its damaged winding within 12 Minutes was conducted by Mr. S. Chakradhar, CEO- Haridwar & Roorkee Division Vijai Electricals Limited who answered all questions/ quires to the

satisfaction of the participants. Besides M/s Vijai Electricals Haridwar Unit sponsored the Mementos, delegate bags and hosted the networking grand dinner in the evening.

The objective of the seminar was to promote sustainable development by spreading awareness among power utilities and transformer manufacturers to adopt standards and update technical specifications of the transformers.

Distribution Transformers (DTs) are key assets for any distribution network. Their reliable and efficient operation can result in long-term benefits for the power distribution utilities. Uttarakhand Power Corporation Ltd (UPCL), the State Power Distribution Utility & service provider, supplies quality & reliable power to over 1.89 million consumers of electricity spread over the 13 Districts of Uttarakhand. UPCL recently committed to providing electricity to all the BPL families without any charge. This would cover about 3, 52,000 households that have been identified by December 2018 under the Prime Minister's "Saubhagya" Yojana.

However, there are high technical losses due to inadequate investments in system improvement as well as unplanned extensions of the distribution system. One of the reasons of increasing trend of these losses in DTs is poor efficiency due to unbalanced loading conditions. The DT failure rate in India is high of the order of 12-15% (in State Utilities), as against a global average of less than 1% while the Distribution Transformers failure rate in Roorkee, Haridwar, Kashipur, Dehradun, Udham Singh Dist. is 5 - 6%. There are no adequate measures for DT upgradation through proactive repair as only failed DTs are sent for repair. Moreover installation, O & M needs to be strengthen. Besides active repair is a preferred approach over reactive repair, which would dramatically reduce the failure rate and also reduce the technical losses and improve reliability of power supply to the satisfaction of the consumers. In this aspect ICA India has explored the feasibility of reducing technical losses in Distribution Transformers (DT) through Active Repair over the currently prevailing Reactive repair methods. This proposal of DTs active repair enables the Utility to bring down no-load and load losses proactively. This in fact is akin to open heart surgery for the Distribution Transformers which are brought from the field and can reduce by load losses by 40% by using Copper windings in place of Aluminium

windings. This is a first-of-its-kind concept in the Country entailing strong business case for Indian DISCOMs to consider this for overall economy.

The speakers at the event were representatives from BIS, CEA, UPCL, OEM, ITMA and Testing agencies. The event was well received by consultants, transformer manufacturers, power utilities, and general industries utilizing the Distribution Transformers (DT).