

REGIONAL HALF DAY WORKSHOP/ SEMINAR ON STANDARDIZATION, CERTIFICATION, QUALITY CONTROL ORDER, TESTING, ENERGY EFFICIENCY, RELIABILITY OF DISTRIBUTION TRANSFORMERS AND OTHER RELATED ISSUES AT JAIPUR ON 7TH SEPTEMBER 2017 AT HOTEL FORTUNE, SELECT METROPOLITAN , JAIPUR, RAJASTHAN.

Bureau of Indian Standards (BIS) with support of Indian Transformer Manufacturer Association (ITMA), International Copper Association India (ICA India) has taken the initiative to spread awareness among power utilities and transformer manufacturers to help them adopt the standard and update their technical specifications. In an attempt to facilitate sustainable development in India BIS, ICAI and ITMA today conducted a seminar on "Standardization, Certification & Quality Control Order, Testing Energy Efficiency (EE) and Reliability of Distribution Transformers". The seminar was conducted in association with Central Electricity Authority (CEA), and Bureau of Energy Efficiency (BEE). Distribution transformers (DT) is a vital equipment in electrical system to supply power to end consumers. Failure rate of DTs are very high in India generally to the order of 15% whereas in efficient utilities or advanced countries this is less than 1%. Reliability is an issue that has been under active consideration of policy makers aiming to supply quality power to all 24 x 7 basis. Keeping this in mind Government of India introduced quality control order for DTs as well mandating BIS certification that is ISI mark on Distribution Transformers.

The overarching objective of the seminar was to create awareness on the STANDARD - IS1180 (part-1), Certification & Quality Control of Distribution Transformers and enhance the Operational Efficiency, Incorporate Global Practices, Testing, Failure Analysis, and Improvement in Design and Performance of Distribution Transformers. Mr. Debdas Goswami, Scientist (F) & Head BIS, Jaipur in his welcome address stated that " DT has become a burning issue in recent times. Quality control policy is driven from highest policy makers of the country and BIS has accepted the mandate assigned. Standards are developed with national consensus under watchful eye of experts and users. On gazette notification there were flood of license application across India. But today after two years we at Jaipur have given eighty seven licenses with four more applications under active consideration in Rajasthan region, giving stability and bringing clarity. He mentioned that Rajasthan tops in number of DT Licensee followed by MP and Tamil Nadu. We must congratulate Industry facilitators like ITMA, & ICA India to facilitate in hosting this unique conference first time in the Region. We all are working towards a common national goal of providing continuous quality power supply to the consumers. Through such seminars we aim at helping industry to create awareness and upgrade their knowledge in adopting resourceful ways of preserving energy. It is essential to adopt energy efficient standards for distribution transformers as it will save total cost to consumers – ultimately saving money while serving customers 24 x 7 basis and also reducing energy consumption."

Mr. Manas Kundu, Director - International Copper Association mentioned in his address that , we see winds of change in Rajasthan as in many parts of India and in this city itself one can see lot of economic activities those are driven by electricity. At the same time vast rural India is targeted to be provided with access to energy for which DT is the prime mover. We have standards those are globally one of the best in this area but still our DT failure rates and high technical losses are major areas of concern. So where are we going wrong! We the technical fraternity must ask ourselves what we can do differently to make it better from both reliability

and energy efficiency point of view. Besides EE and Reliability another key area is Repair of DTs. But the questions remains first; why the DT should fail at all being static device. The State of Rajasthan has around 1.3 million DTs and around 25% loss and these should be considered as an opportunity for all of us to put our thinking cap, act and cause change. He mentioned that EE as bottom of pyramid action based on least cost planning approach can contribute 15% of country's energy need.

Mr. Naveen Arora, Director (Technical) Jaipur Vidyut Vitaran Nigam Limited (JVVNL), Government of Rajasthan in his special address, said that "DTs are key assets for electric supply company and its helps in meeting the goal of "Electricity for All" hence the utility is looking for reliable DTs and at the same time energy efficiency too is a focus area since loss of energy is loss of money or revenue for the utility that is always trying to keep the lights on. In Rajasthan 1.25 Crore customers are served by various utilities. In Jaipur 13 lakhs DTs of various capacities both three and single phase are supplying to energy to customers. He mentioned that JVVNL procures around 90000 DTs per year out of which 30 percent DTs are of level 2 efficiency (Star 4 label of BEE) and rest are level 1 (Star 3 of BEE Label) efficiency. However in Dec '16 on receiving Government Order through MoP notification, discontinuing previous star label 1 to 3 of BEE, effectively making star label 4 as new star label 1. The whole process got disturbed and supply of DTs got interrupted for quite some time since all tenders in process has to be retendered in line with guidelines. He appreciated that such unique effort by ITMA, ICA India to bring Standard authority and OEMs along with users like utility allows open minded discussion and seeking resolution of problems that the industry faces. Dialogue between various stakeholders can help avoidance of ambiguity or confusion that exist while implementing new policies. Harmonization of standards between various arms of the Government like BEE and BIS is most needed. He mentioned that DT failure cannot be attributed alone to manufacturing practice but due to varieties of reasons, be it operational or maintenance or asset management issues. Such common forum gives an opportunity to all to deliberate, discuss and resolve issues faced while rolling out ambitious program like Deendayal Upadhyaya Gramin Vidyutikaran Yojana.

Mr. R.K. Shrivastava, Managing Director Rajasthan Urja Vikas Nigam Limited (RUVNL), Govt. of Rajasthan and Chief Guest of the Seminar said in his inaugural address...It is an intensive experience to participate in this unique technical workshop and share the thoughts. Learning and applying the concepts from deliberation during the day will facilitate surely help the DISCOM in making 'Quality Power for All' at an affordable price to consumers. It is essential that we deliver every unit of electricity in a reliable & efficient way for achieving a sustained economic growth of the country. He observed that DTs are number one focus for all public representatives since it is viewed as Life Changer. For vast majority rural population transformers are considered to be blessings and while looking at larger picture one cannot forget the common man. Today every aspect of human life depends on power and rising aspiration of people have made distribution companies job more challenging to rise up to that expectation to adopt sustainable best practices to deliver EE and reliability. He mentioned three key points to be observed by the diverse stakeholders present to ensure better quality and reliability of the product.

1. Utility : The stakeholders from utility sector are always handling burning issues and firefighting so such opportunities must be fully utilized to learn and apply the ideas

discussed. He exhorted attentiveness of utility engineers in such seminars for better learning.

2. OEM : Standardization is very important and intention to create monopoly through small design changes etc may not support the business in long run. He exhorted that OEMs must avoid (a) Red Ocean Strategy where blood bath takes place in limited market and survival faces question mark but rather adopt (b) Blue Ocean Strategy where raise the bar through innovation in design and perfection in quality rather than creating hurdle for others. The blue ocean strategy like achieving 4 or 5 star ratings or proving your equipment lasts really long can give you winning position in market without disturbance.
3. Standardization bodies: Harmonization of standards like star rating of BEE merging with BIS standards can produce environment conducive for ease of doing business or make in India campaign taking deeper root.

He mentioned the hardship that the industry is currently going through and requested all to make constructive attempt in quick resolution of the problems due to dual certification of Distribution Transformers. He thanked on behalf of ITMA & ICAI to each dignitaries for having spared time to be present and all participants to make the conference on overwhelming success.
