Key update on Indian Standard IS 1180(Part-1) : 2014 for Distribution Transformers and Quality Control Order

Asit Kumar Maharana
The erstwhile BIS product Certification Scheme under the BIS Act 1986 is now governed by the BIS Act 2016 and BIS (Conformity Assessment) Regulations, 2018.

The Product Certification Scheme (Mark) is now operated as per type-E Scheme specified under Schedule II of BIS (Conformity Assessment) Regulations 2018.
Major Changes

- At the time of Grant of Licence, a licence can now have an initial validity of up to 2 years.

- At the time of renewal, a licence holder can now apply for renewal of licence for a period up to five years by paying the requisite fee.

- In case renewal application along with the fee is not deposited in time, a late fine of Rs. 5000.00 will be charged.
Major Changes – contd.

- Responsibility of Licence holder for Conformity of the product has been incorporated.

  *It means for any non-conformity of the product the licence holder is responsible at all times.*

- Every person- Distributor, Seller are now responsible for ensuring purchase of ISI Marked product from the licence holder. *(Sec. 18)*

  *It means the distributor or the seller cannot plead ignorance about sale of counterfeit ISI Marked product.*
Major Changes – Contd.

- Seller is to be held responsible for ensuring proper marking details on the ISI Marked Product sold by it.

  *It means the seller must inform the distributor or the licence holder about any deficiency in the details of labelling and marking on the product. It also provides right to the seller to ask for proper labels on the product and test certificates.*
Major Changes – Contd.

- It is mandatory for every licence holder to submit such information and such material/sample of the product which BIS may require for monitoring the quality of the product and recovery of the fee.

  *It means that the licence holder must provide correct and factual information on the quantity of ISI Marked product produced and the parties to whom they are sold as and when required by BIS.*

  Any non-submission of such information or submission of incorrect information is a violation of the Law i.e. the BIS Act 2016.
Major Changes – Contd.

- BIS has been empowered to publish results of inspection and testing of products which bear the ISI Mark.
- In case of non-conforming product, BIS may direct the licence holder to recall such products from market.
- In case of non-conforming products, BIS may also direct the licence holder to repair or replace such products or pay compensation to the buyers for losses/injury caused by such non-conforming product.
Recent Development in Standardization Field at BIS

- Loss levels specified in IS 1180 (Part 1) : 2014 are to be aligned with that prescribed by BEE
- Distribution Transformers for use with ester oils – Final draft is ready
- Dry Type Distribution Transformers – Document is ready – only loss levels are to be finalized
- Repairing of Distribution Transformers – Document is ready (This will be a Code of Practice Standard)
- Solar Transformer – Work is in progress
# Sampling Guidelines

<table>
<thead>
<tr>
<th>Nominal System Voltage</th>
<th>Standard Ratings</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Up to and including 200 kVA, 3 Phase</td>
</tr>
<tr>
<td>3.3 kV, 6.6 kV &amp; 11 kV</td>
<td>One sample of highest rating</td>
</tr>
<tr>
<td>Above 11 kV &amp; Up to &amp; including 22 kV</td>
<td>-do-</td>
</tr>
<tr>
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If transformers with higher energy efficiency level is drawn for testing and found passing, the scope of licence shall also cover transformers with lower energy efficiency levels, as specified in the ISS within the group.

For Sealed and Non-Sealed construction, separate samples are not required to be drawn for Independent testing. If sealed sample is already drawn, non-sealed variety can be included in the scope of the licence after its conformity to pressure test requirements as per IS 1180(Part 1): 2014 and vice-versa. This testing may be done in factory or independent testing. Inspection charges as applicable shall be collected for factory testing.
‘Longevity’ vs ‘Life Expectancy’ of DTs

- Life Expectancy has gone up due to –
  - Superior quality of raw materials
  - Improvement in design
  - Reduction of variance due to increased used of machines

- Longevity ??
Thank you.