

## BUREAU OF INDIAN STANDARDS

### For BIS Use Only

Name of the committee	Meeting No.	Day	Date	Time	Venue
Basic Electrotechnical Standards and Power Quality Sectional Committee, ETD 01	16 <sup>th</sup>	Tuesday	30 <sup>th</sup> August 2022	1100	Online Meeting

**CHAIRPERSON:** Smt. Vandana Singhal

**MEMBER SECRETARY:** Shri Ashok Kumar

### **MEMBERS PRESENT:**

Sl. No	Name	Organization	Attendee Email
1.	Smt Vandana Singhal	Central Electricity Authority	cedpr-cea@gov.in
2.	Shri Hiren Tailor	Adani Electricity Limited	hiren.tailor@adani.com
3.	Shri Saurabh Tripathi	AYT Engineering Private Limited	saurabh.tripathi@solvina.com
4.	Shri Gaurav Sharma	BSES Yamuna Power Limited	gaurav_sh_80@yahoo.co.uk
5.	Shri Ashish Joshi		ashish.k.joshi@relianceada.com
6.	Shri Purkayastha	Calcutta Electric Supply Corporation Limited,	shamik.purkayastha@rpsg.in
7.	Shri Nilanjan Saha		nilanjan.saha@rpsg.in
8.	Dr Pradeep Nirgude	Central Power Research Institute	pmnirgude@cpri.in
9.	Smt Priyanka Jain	CSIR - National Physical Laboratory, New Delhi	jainp@nplindia.org
10.	Shri Rohit Pathak	Dehn India Private Limited	rohit.pathak@dehn.in
11.	Shri Anil Kumar		anil.nair@dehn.in
12.	Shri Gajendra Tiwari		gajendra.tiwari@dehn.in
13.	Shri Ashish Arora	Delhi Metro Rail Corporation Limited	ashish.arora@dmrc.org
14.	Shri Amit Gola,	Directorate General Factory Advice Service and Labour Institutes	amit.gola@dglasli.nic.in
15.	Shri Rajen Mehta	Efficienergi Consulting Private Limited	rajen@efficienergi.com
16.	Shri Sunil Bhure	Electrical Contractors Association of	trimurty123@gmail.com

		Maharashtra,	
17.	Shri Ravi Nandwana	Electrical Research and Development Association	ravi.nandwana@erda.org
18.	Shri Baldev Raj Narang	Indian Electrical and Electronics Manufacturers Association	baldevrajnarang@clariantindia.co.in
19.	Shri Manas Kundu	International Copper Association India	manas.kundu@copperalliance.org
20.	Shri N. Kishor Narang	Narnix Technolabs Private Limited	kishor@narnix.com
21.	Shri Brijesh	Secure Meters Limited	brijesh.dixit@securemeters.com
22.	Shri Rajnish Ameta		rajnish.ameta@securemeters.com
23.	Smt Kiran Kelapure	Yadav Measurements Private Limited	kiran.kelapure@ymllabs.com
24.	Shri Bhanu Bhushan		a3bhanu@gmail.com
BISDG			
29.	Shri Ashok Kumar	Scientist -B, ETD, BIS	ashok9413@bis.gov.in

## ITEM 0 WELCOME AND OPENING REMARKS BY THE CHAIRPERSON

**0.1** Smt. Vandana Singhal, Chairperson ETD 01, welcomed the members present in the meeting and hoped for a fruitful discussion of all agenda points.

**0.2** Shri Ashok Kumar, Member Secretary of ETD 01, welcomed all the members present in the meeting. The meeting started with a brief introduction of the members present.

## ITEM 1 CONFIRMATION OF THE MINUTES OF THE LAST MEETING

**1.1** In view of no comments received, the minutes of the 15<sup>th</sup> meeting of Basic Electrotechnical Standards and Power Quality Sectional Committee, ETD 01 held on 16-09-2021 at Webex (Online) circulated vide BISDG letter No. ETD 01/A-2.15 dated 25-11-2021 were formally confirmed.

## 1.2 ACTION ARISING OUT OF PREVIOUS MEETING

Sl. No.	Item No & Subject	Subject	Decision Taken in the Committee
1.	1.2 (1) The present position of work of the corresponding	The document on Draft Standard (16350) 'Power Quality Measurement and Monitoring Methods' wide	Committee approved the updated draft and decided to wide circulate the draft for 15 days. In case of no comments on WC draft, draft will be

	IEC/IEEE/EN in the field of Power Quality.	<p>circulated after editorial corrections.</p> <p>Comments received on WC draft sent to committee members seeking suggestions to resolve them. Updated draft after incorporating the comments circulated among the committee members.</p>	finalized and sent for printing with the approval of chairman.
<b>2.</b>	<b>1.2 (2)</b> Composition of Basic Electrotechnical Standards and Power Quality Sectional Committee, ETD 01	Co-option request sent to all the organization.	It is decided to resend the co-option request to all the organizations. Members were requested to provide contact details of these organizations.
<b>a.</b>	Steel Authority of India Limited (SAIL)	Nominations received from SAIL.	
<b>b.</b>	TATA Steel	No reply received from rest of the organizations	
<b>c.</b>	Reliance Power		
<b>d.</b>	GE Power India Limited, Noida		
<b>e.</b>	MSEDCL (Maharashtra State Electricity Distribution Company Limited)		
<b>f.</b>	CTUIL		
<b>g.</b>	Kerala Electricity Board		
<b>h.</b>	BSES		
<b>i.</b>	CESC, Kolkata		
<b>j.</b>	TANGEDCO (Tamil Nadu Generation and Distribution Corporation Limited)		
<b>k.</b>	National Test House (NTH)		
<b>l.</b>	NPCIL		

<b>m.</b>	RDSO		
<b>3.</b>	<p><b>1.2 (3)</b></p> <p><u>Revision of IS 12360</u></p> <p>The composition of the Working Group is listed below:</p> <ol style="list-style-type: none"> <li>1. CEA</li> <li>2. Secure Meters</li> <li>3. YMPL</li> <li>4. Utilities- DMRC/TATA Power</li> <li>5. International Copper Association India, Mumbai</li> </ol>	<p>The Members of the panel have decided in favor of changing rated voltage level from 240V/415V to 230V/400 V with a tolerance band of <math>\pm 10\%</math> while providing transition time for switchover to 230V. In due course of time, the tolerance band shall be reduced to <math>\pm 6\%</math>.</p>	<p>The committee agreed in favor of changing rated voltage level from 240V/415V to 230V/400V with a tolerance band of <math>\pm 6\%</math> while providing transition time of 1 year after the publication of standard for switchover to 230V. A draft amendment will be prepared by the panel and same will be wide circulated for the period of 1 month. In case of no comments in WC stage, the draft will be finalized.</p>
<b>4</b>	1.2 (4)		
<b>a.</b>	<p><b>ETD 01 (18633)</b> <b>IEC 60447: 2004</b></p> <p>Basic and Safety Principles for Man-Machine Interface Marking and Identification - Actuating Principles (First Revision)</p>	<p>The committee decided to WC IEC 60447: 2004 as First revision of IS 7118: 1973.</p>	<p>WC of these draft documents completed; no comment received.</p> <p>Committee decided to finalize WC drafts.</p>
<b>b.</b>	<p><b>ETD 01 (18650)</b> <b>IEC 60445: 2021</b></p> <p>Basic and Safety Principles for Man-Machine Interface Marking and Identification - Identification of Equipment Terminals Conductor Terminations and Conductors (First Revision)</p>	<p>The committee decided to WC IEC 60445: 2021 as First revision of IS 11353: 1985.</p>	
<b>c.</b>	<p><b>ETD 01 (20007)</b> <b>IEC 60050-395: 2014</b></p> <p>ELECTROTECHNICAL VOCABULARY</p>	<p>The committee decided to WC IEC 60050-395: 2014 as revision of IS 1885: Part 14: 1967.</p>	

	PART 14 NUCLEAR POWER PLANTS	
<b>d.</b>	<b>ETD 01 (20010)</b> <b>IEC 60050-845: 2020</b>  ELECTROTECHNICAL VOCABULARY PART 16: LIGHTING	The committee decided to merge Sec 1,2,3 of IS 1885: Part 16 into one after the adoption of IEC 60050-845:2020
<b>e.</b>	<b>ETD 01 (20095)</b> <b>IEC 60050-441: 1984</b>  ELECTROTECHNICAL VOCABULARY PART 17 SWITCHGEAR AND CONTROL GEAR Second Revision	The committee decided to WC IEC 60050-441: 1984 as revision of IS 1885: Part 17: 1979.
<b>f.</b>	<b>ETD 01 (20012)</b> <b>IEC 60050-601: 1985</b>  ELECTROTECHNICAL VOCABULARY: PART 30 OVERHEAD TRANSMISSION AND DISTRIBUTION OF ELECTRICAL ENERGY	The committee decided to WC IEC 60050-601: 1985 as revision of IS 1885: Part 30: 1971.
<b>g.</b>	<b>ETD 01 (18659)</b> <b>IEC 60050-614: 2016</b>  Electrotechnical Vocabulary Part 614: Generation Transmission and Distribution of Electricity Operation (First Revision)	The committee decided to WC IEC 60050-614: 2016 as revision of IS 1885: Part 70: 1993.
<b>h.</b>	<b>ETD 01 (20080)</b> <b>IEC 60027-1: 1992</b>  LETTER SYMBOLS AND SIGNS USED IN ELECTRICAL TECHNOLOGY - PART 1: GENERAL	The committee decided to merge IS 3722: Part 1 and IS 3722: Part 2 into one after adoption of latest IEC as Indian Standard. Amendment to base IEC will be wide circulated after the adoption.
<b>i.</b>	<b>ETD 01 (18633)</b> <b>IEC 60447: 2004</b>  Basic and Safety	The committee decided to WC IEC 60447: 2004 as revision of IS 7118: 1973.

	Principles for Man-Machine Interface Marking and Identification - Actuating Principles (First Revision)		
<b>k.</b>	<b>ETD 01 (18646)</b> <b>IEC 60196: 2009</b>  IEC standard frequencies (First Revision)	The committee decided to WC IEC 60196: 2009 as revision of IS 7691: 1975.	
<b>l.</b>	<b>ETD 01 (18648)</b> <b>IEC 81346-1: 2009</b>  Industrial Systems Installations and Equipment and Industrial Products - Structuring Principles and Reference Designations - Part 1: Basic Rules (First Revision)	The committee decided to WC IEC 81346-1: 2022 as revision of IS 8270: Part 2: 1976	
<b>m.</b>	<b>ETD 01 (20017)</b> <b>IEC 61082-1: 2014</b>  PREPARATION OF DOCUMENTS USED IN ELECTROTECHNOLOGY - PART 1: RULES	The committee decided to merge 5 Parts of 8270 series (Part 1,3,4,5,6) into one after the adoption of latest IEC as Indian Standards.	
<b>n.</b>	<b>ETD 01 (18649)</b> <b>IEC 61140: 2016</b>  Protection Against Electric Shock - Common Aspects for Installation and Equipment (First Revision)	The committee decided to WC IEC 61140: 2016 as revision of IS 9409: 1980	
<b>o.</b>	<b>ETD 01 (18651)</b> <b>IEC 60152: 2021</b>  Designation of phase differences by hour numbers in three-phase AC systems (First	The committee decided to WC IEC 60152: 2021 as revision of IS 11354: 1985	

	Revision)		
<b>p.</b>	<b>ETD 01 (20085)</b> <b>IEC</b> <b>62262:2002+AMD1:20</b> <b>21CSV</b>  Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts IK Code	The committee decided to WC IEC 62262:2002+AMD1:2021CS V as revision of IS 17050: 2018	
<b>5.</b>	<b>Revision of IS 2032: Part 25: 1980</b>  Graphical symbols used in electrotechnology Part 25 electrical installations in ships	The committee decided to supersede the IS 2032: Part 25 with the IEC 60092-201: 2019 and IEC 60092-202: 2016. Respective IECs are already adopted in <b>ETD 20 'Electrical Installation'</b> Sectional committee.  Mail sent to committee members seeking their opinions to revise IS 2032: Part 25: 1980.	Committee members suggested to refer IEC 60417 series to revise the IS 2032: Part 25: 1980. IEC document will be sent to member to examine and share their views to revise the Indian Standard.

## **ITEM 2 REVIEW OF COMPOSITION OF BASIC ELECTROTECHNICAL STANDARDS AND POWER QUALITY SECTIONAL COMMITTEE, ETD 01**

**2.1** The committee reviewed the composition. It was requested to all the participants to inform BIS regarding any change in their current organization.

## **ITEM 3 PRESENT POSITION OF WORK OF ETD 01**

**3.1** The committee noted the information given in the agenda and decided on the following:

**a.** The committee deliberated upon the revision of Electrotechnical Vocabulary standards IS 1885 and IS 12032 series that have been withdrawn in IEC. The IEC 60617 series has been replaced by **IEC 60617: 2012 DB** which contains graphical symbols for use in electrotechnical diagrams. The possibility of adopting the online database for graphical symbols will be explored. The IS 12032 series will be revised based on the snapshot of IEC 60617: 2012 DB in case it is unfeasible to adopt the online database.

b. The committee felt the need to revise the **IS 17036: 2018**. Members were requested to send the queries via email.

c. The decision with respect to several Indian Standards in the Program of Work is listed in table below.

Sl. No.	IS No.	Title	Decision Taken
1.	IS 1885: Part 28: 1993	Electrotechnical Vocabulary Part 28 instrument transformers (First Revision)	In view of no comments received on these standards, committee decided to reaffirm these standards.
2.	IS 1885: Part 38: 1993	Electrotechnical Vocabulary Part 38 power transformers and reactors (Second Revision)	
3.	IS 1885: Part 42: 1993	Electrotechnical Vocabulary: Part 42 Power capacitors (First Revision)	
4.	IS 1885: Part 69: 1993	Electrotechnical Vocabulary Part 69 generation transmission and distribution of electricity -Generation	
5.	IS 1885: Part 71: 1993	Electrotechnical Vocabulary Part 71 generation transmission and distribution of electricity -Substations	
6.	IS 11954: 1987	Guide for colour coding of electrical mimic diagrams	The committee decided to revise these standards to bring the standard in the latest style and format of the Indian Standards. There will not be any technical changes in the draft w.r.t previous edition.
7.	IS 1885: Part 34: 1972	Indian standard electrotechnical Vocabulary Part 34 cinematography	

#### **ITEM 4 REVIEW/REAFFIRMATION OF INDIAN STANDARDS**

4.1 The committee noted the information given in the agenda.

#### **ITEM 5 INTERNATIONAL ACTIVITIES**

5.1 The committee noted the information given in the agenda. Members are requested to review the information given in Annex 3 of Agenda (*POW of IEC TC*) and send inputs via email.

#### **ITEM 6 IMPLEMENTATION STATUS OF INDIAN STANDARDS**

The committee noted the information given in the Agenda.

#### **ITEM 7 TRAINING PROGRAMME**

The Committee noted the information about NITS which has been setup by BIS to provide quality platform to various organization who might need assistance for their personnel to achieve quality in their field.

## **ITEM 8 ANY OTHER BUSINESS**

There being no further business, the meeting ended with a vote of thank to the chair.

## **ITEM 9 DATE AND PLACE OF NEXT MEETING**

The following timelines were decided:

ETD 01: Nov/Dec 2022 (in consultation with chairman)