



Minutes

Name of the Committee	No. of Meeting	Day	Date	Time	Venue
Power Cables Sectional Committee, ETD 09	31 st	Tuesday	22 nd Oct 2024	1100 hrs	Hybrid (CPRI Bengaluru)

CHAIRPERSON: Smt. Meena K.P.

MEMBER SECRETARY: Md. Israfil

Members Present:

S.No.	Organization	Member Name	Member Email	Mode of participation
1	Central Power Research Institute, Bengaluru	Smt. Meena K.P. (Chairperson)	meena@cpri.in	Physical
2	Bureau of Indian Standards	Md. Israfil (Member Secretary)	eetd@bis.gov.in	Physical
3	Bureau of Indian Standards	Shri Abhishek Murmu	eetd@bis.gov.in	Physical
4	3 M Electro & Communication India Private Limited	Shri Sanjay Jha	sjha@mmm.com	Physical
5	3 M Electro & Communication India Private Limited	Shri Permeet Singh	psingh@mmm.com	Physical
6	Apar Industries Limited, Mumbai	Shri Amit Kumar Samanta	ak.samanta@apar.com	Physical
7	Central Power Research Institute, Bengaluru	Shri Thirumurthy	thiru@cpri.in	Physical
8	Central Power Research Institute, Bengaluru	Smt. R. Arunjothi	arunjothi@cpri.in	Physical
9	Central Power Research Institute, Bengaluru	Shri P.V.Satheesh Kumar	pvs Kumar@cpri.in	Physical
10	Finolex Cables Limited, Pune	Shri P.N. khairnar	pkhairnar@finolex.com	Physical
11	Finolex J-Power Systems Limited, Pune	Shri Avijit Chakraborty	avijit_chakraborty@finolexjpower.com	Physical
12	Finolex J-Power Systems Limited, Pune	Shri Harshal Toriya	harshal.toriya@finolexjpower.com	Physical
13	Finolex J-Power Systems Limited, Pune	Shri Nilesh Bute	nilesh.bute@finolexjpower.com	Physical
14	International Copper Association India, Mumbai	Shri Amol Kalsekar	amol.kalsekar@copperalliance.org	Physical
15	LS Cable India Private Limited, Rewari	Shri Ajay Kumar Mishra	ajay.mishra@lscable.in	Physical
16	LS Cable India Private Limited, Rewari	Shri Dinesh Kumthekar	dinesh.kumthekar@lscable.in	Physical



17	RR Kabel Limited, Silvassa	Shri Ronak Bhatt	ronak.bhatt@rrglo bal.com	Physical
18	Raychem RPG Private Limited, Chennai	Shri R.S. Anekar	ranekar@raychemr pg.com	Physical
19	Raychem RPG Private Limited, Chennai	Shri Abhijit Dhamale	adhamale@rayche mrrpg.com	Physical
20	Tata Consulting Engineers Limited, Navi Mumbai	Shri G.V. Chandra Shekhar	gvchandrasedkhar@ tce.co.in	Physical
21	Universal Cables Limited, Satna	Shri Yogendra Singh Tiwari	yogendra.tiwari@u nistar.co.in	Physical
22	IN PERSONAL CAPACITY	Shri B. Nageshwar Rao	nageshburjupati@g mail.com	Physical
23	IN PERSONAL CAPACITY	Shri Sitaraman Rama Prasath	ramaprasath25@g mail.com	Physical
24	3 M ELECTRO & COMMUNICATION INDIA PRIVATE LIMITED	Shri Ashish Agarwal	aagrawal@mmm.c om	Virtual
25	Apar Industries Limited, Mumbai	Shri Bharat Patel	bharat.patel@apar. com	Virtual
26	Bharat Heavy Electrical Limited, New Delhi	Smt. TI Santha	tis@bhel.in	Virtual
27	Central Electricity Authority, New Delhi	Shri Nishant (Representative)		Virtual
28	Central Electricity Authority, New Delhi	Shri Amrendra pratap (Representative)		Virtual
29	Central Power Research Institute, Bengaluru	Dr. Neha Adhikari	nehaadhikari2008 @gmail.com	Virtual
30	Delhi Metro Rail Corporation Limited, Delhi	Shri. Ashish Arora	ashish_delhimetro @yahoo.co.in	Virtual
31	Delhi Metro Rail Corporation Limited, Delhi	Shri Malay Saha	malay_saha@dmrc .org	Virtual
32	Electrical Research and Development Association, Vadodara	Shri Shailesh Patel	shailesh.patel@erd a.org	Virtual
33	Engineers India Limited, New Delhi	Shri A. Sai	achutuni.sai@eil.c o.in	Virtual
34	Finolex Cables Limited, Pune	Shri Bipin Patil	bipin_patil@finole x.com	Virtual
35	Gujarat Energy Transmission Corporation Limited, Vadodara	Smt. Dhara D. Bhatt	deengg5.getco@ge bmail.com	Virtual
36	Indian Electrical and Electronics Manufacturers Association, New Delhi	Shri Rishabh Joshi	rishabh.joshi@iee ma.org	Virtual
37	International Copper Association India,	Shri Jyotish Pande	jyotish.pande@inte rnationalcopper.or	Virtual



	Mumbai		g	
38	KEC International Limited, Mumbai	Smt. Rajani Pande	pandera@kecrpg.com	Virtual
39	NHPC Ltd.	Shri Pankaj Prasoon	pankajprasoon@nhpc.nic.in	Virtual
40	National Capital Region Transport Corporation, New Delhi	Shri Pavan Kumar P.	pavan.kumar@ncrtc.in	Virtual
41	National Capital Region Transport Corporation, New Delhi	Shri Afroz Ansari	afroz.ansari@ncrtc.in	Virtual
42	Nuclear Power Corporation of India Limited, Mumbai	Shri. Shashank Singh	em.shashank@gmail.com	Virtual
43	Paramount Communication Limited, Mumbai	Shri Arun Sharma	arun@paramountcapabilities.com	Virtual
44	Polycab Wires Private Limited, Mumbai	Shri Bharat Sehgal	bharat.sehgal@polycab.com	Virtual
45	RR Kabel Limited, Silvassa	Shri Jose Thomas	jose.thomas@rrglobal.com	Virtual
46	RR Kabel Limited, Silvassa	Shri Balachandran Dharman	Balachandran.Dharman@rrglobal.com	Virtual
47	Shakun Polymers Limited, Vadodara	Shri Priten Shah	technical@shakunpolymers.com	Virtual
48	Tata Power Delhi Distribution Limited, New Delhi	Shri Sanjeev Atri	sanjeev.kumar@tatapower-ddl.com	Virtual
49	The Brihanmumbai Electricity Supply and Transport, Mumbai	Shri M. B. Bamble	deen@bestundertaking.com	Virtual
50	The Brihanmumbai Electricity Supply and Transport, Mumbai	Shri S. V. Fulpagare	dceds@bestundertaking.com	Virtual
51	Universal Cables Limited, Satna	Shri C.S. Mohanty	csmohanty@unistar.co.in	Virtual
52		Shri Chandrakant Brahmane		Virtual

ITEM 0 WELCOME AND OPENING REMARKS BY THE CHAIRPERSON

The Chairperson, Smt. Meena K.P. welcomed all the members present in the 31st meeting. She requested all the members to actively participate in the discussion during the meeting to arrive at the decision for documents under consideration. She apprised the members regarding discussion/decision on various subjects/documents during the meeting and the new subjects taken by IEC TC 20 for formulation of new standards. She requested Panel members to actively work on the assigned committee work.



ITEM 1 CONFIRMATION OF THE MINUTES OF THE LAST MEETING

- 1.1 The committee formally confirmed the minutes of the last meeting (30th meeting) of Power Cables Sectional Committee, ETD 09 held on 16th May 2024, through hybrid mode which were circulated vide BISDG letter No. ETD 09/A 2.30 dated 27 May 2024.

ITEM 2 ACTIONS ARISING OUT OF PREVIOUS MEETING

Sl. No	Item of the last minutes	Draft Indian Standard/Document	Action	Decision of the committee
Panel-1 (Low Voltage cables upto 1100 V and test methods)				
1.	2.2	To revise IS 14255:1995 i.e. IS 14255 (Part 1) Aerial Bunched Cables for Working Voltages upto and Including 1.1 kV.	Doc under WC stage. Comments received, attached at Annex-5	Committee considered the comments and decided to print the document after necessary modification
2.	2.5	Revision of IS 694	Doc under WC stage. Comment received from 1. RR kabel, ICAI to consider addition of “Class-5 conductor not to be used in house wiring” under marking clause. And 2. Addition of 8 & 13 sqmm sizes from CTBO-BIS	Committee advised panel-1 to discuss the comments and submit recommendation within 03 months.
3.	2.5	Draft Standard on screened cables	Doc under p-draft stage. No comments received, doc may be considered for WC for 30 days.	Committee agreed to wide circulate the doc for 60 days.
4.	2.8	Revision of IS 4289 (Part 1) standards for lifts	Doc under WC. No comments received, doc may be considered for printing	Committee decided to print the document.
5.	2.6	Revision of IS 3961 (Part 3): 1968	Doc under WC. Comments received, attached at Annex-5	Committee advised panel-1 to discuss the comments and submit recommendation within 03 months.



6.	2.6	Revision of IS 3961(Part 5): 1968	Draft for revision of IS 3961(Part 5) may be considered for WC.	Committee advised panel-1 to discuss the comments and submit recommendation within 03 months.
7.	2.7	Revision of IS 1554 (part 1)	Doc under WC. Comments received, attached at Annex-5.	Committee advised panel-1 to discuss the comments and submit recommendation within 03 months.
8.	2.7	Revision of IS 1554 (part 2)	Doc under WC. Comments received, attached at Annex-5.	Committee considered the comments and decided to print the document after necessary modification.
9.	2.7	Revision of IS 7098 (part 1)	Doc under printing	Committee noted
10.	2.8	NWIP (Flat polyvinyl chloride sheathed flexible cables) standard for cables for use in lifts applications.	Doc circulated as p-draft, no comments received. Doc may be considered for WC for a period of 30 days.	Committee decided to wide circulate the doc for 90 days and also comments may be sought from ETD 25.
11.	2.10	NWIP on Power Cables for e-Vehicle Charging Systems	Doc. Circulated as p-draft, no comments received. Doc. may be considered for wide circulation.	Committee decided to wide circulate the doc for 60 days, if no comments received the doc to be considered for printing.
12.	2.11	IS 2465 "Cables for Motor Vehicles"	Doc may be reviewed as per IS/ISO 6722 (part 1 & 2) Road vehicles - 60 V and 600 V single-core cables (copper & Aluminum).	Committee requested ERDA to compare IS 2465 with IS/ISO 6722 and submit recommendation within 30 days.
13.	2.12	IS 17293: 2020 Electric cables for photovoltaic systems for rated voltages 1 500 Volts	Comment submitted to IEC TC 20/WG17 for amendment in IEC 62930 in IR values of 25, 150, 240 sq mm.	Committee noted
14.	2.14	ETD 09(24337) NWIP on Instrumentation and control Cables	Comments attached at Annex-5	Committee requested RR Kabel to provide input on the comments within 30 days.
15.	2.19	IS 9968-1, comment	Comments attached at Annex-5	Committee considered the comments and decided to print the document after necessary modifications.



16.	2.21	NWIP- FEP insulated single core shielded wire with FEP jacket.	Draft awaited	Committee requested Lapp India to provide draft within 30 days
Panel-2 (High voltage cables above 1100V and test methods)				
17.	2.1	NWIP received to formulate Indian standard based on IEC 62895: 2017 (High voltage direct current (HVDC) power transmission - Cables with extruded insulation and their accessories for rated voltages up to 320 kV for land applications - Test methods and requirements)	Printed as IS 18833:2024/IEC 62895:2017 For information	Committee noted
18.	2.2	To formulate IS 14255(Part 2) - Aerial Bunched Cables for Working Voltages from 3.3 kV upto and including 33 kV	Comment attached at Annex-5	Doc to be wide circulated for 60 days after adding -Water tight stranded Aluminium conductor of sizes 150 sq.mm and above as note.
19.	2.3	ETD 09 (22546) IS 7098: part 3 (revision) Cross-linked polyethylene insulated thermoplastic sheathed cables- specification part 3 for working voltages above 33 kv and up to including 400 kV	Document Under Printing.	Committee noted
20.	2.9	IS 1255 Part 2: Code of practice for installation and maintenance of power cables from 66 kV up to and including 500 kV rating.	Panel-2 to review the working draft and submit final draft for consideration to technical committee	Committee advised panel-2 to submit draft within 03 months.
21.	2.13	IS 1255 (Part 1) Code of Practice for Installation and Maintenance of Power Cables upto and including 33 kV Rating (<i>Third Revision</i>)	Panel-2 to review the working draft and submit final draft for consideration to technical committee	Committee advised panel-2 to submit draft within 03 months.
22.	2.18	Amendment 3 to IS 9968-2:2002 (Specification for elastomer - Insulated cables: Part 2 for working voltages from 3.3 kV up to and including 33 kV (<i>First Revision</i>))	Panel-2 to review the working draft and submit final draft for consideration to technical committee	Committee advised panel-2 to submit draft within 03 months.



Panel-3 (cable accessories and test methods)				
23.	2.4	-Revision of IS 13573 (Part -2) :2011/ IEC 60502-4:2005 (Cable accessories for extruded power cables - Specification: Part 2 for working voltages from 3.3 kV(Ue) up to and including 33 kV(E) - Test requirements.	Panel-3 to submit the draft for consideration to technical committee.	Committee advised panel-3 to submit draft within 03 months.
24.	2.4	Formulate new standard 13573-4 and accessories	Panel-3 to submit the draft for consideration to technical committee.	Committee advised panel-3 to recommend formulation of standard and its voltage ratings within 03 months.
25.	2.2	To formulate testing of Aerial Bunched Cables Accessories covering voltages from 1.1 kV upto and including 33 kV- Test methods and test requirements	Panel-3 to submit the draft for consideration to technical committee.	Committee advised panel-3 to submit draft within 03 months.
26.	2.15	ETD 09(24344) - Methods of Test for Cables Part 65 Thermal Short Circuit Test Through Conductor/ Metallic Sheath/ Screen Armor	Comments attached at Annex-5	Committee requested CPRI to provide the draft after considering the comments for wide circulation for 60 days.
27.	2.16	IS 10810 (Part 62) : 1993 Methods of test for cables: Part 62 Fire resistance for bunched cables	Draft submitted, doc may be reviewed by the Panel-3 for circulation as WC.	Committee advised panel-1 to submit draft within 03 months.
28.	2.17	IS 10810 (Part 63) : 1993 Methods of test for cables: Part 63 Smoke density for electric cables under fire conditions		Committee advised panel-1 to submit draft within 03 months.
29.	2.20	IS 17048- toxicity and flex test requirement	Draft for toxicity test submitted by CPRI, doc may be circulated to committee member as p-draft for 30 days.	Committee decided to circulate the doc as p-draft for 30 days, if no comments received doc may be wide circulated for 90 days.
30.	5	Review of IS 17505(part 1) a) Armour Coverage percentage b) Table-6 (missing range 45-50mm)	Inputs awaited	Committee requested Ronak Bhatt, Krishna Kumar, C S Mohanty to provide data for additional requirements within 30 days.



ITEM 3.0 COMPOSITION OF SECTIONAL COMMITTEE AND PANELS

3.1 The committee considered the nominations for co-option in the committee for:

1. NTPC New Delhi- Shri Deepak Kumar, Shri Rajesh Sharma
2. MSME, Puducherry- Shri S. Dharmaselvan
3. Axis Electrical component- Shri Abhijnan Chowdhuri (Panel-3)

The following panels constituted for specific task viz.:

- a) Panel-1 for Low Voltage cables- up to 1100 V and test methods

Sl. No.	Member Name	Organization
1.	Shri Krishna Kumar S. (Convenor)	Lapp India Private Limited, Jigani
2.	Shri Amit Kumar Samanta	Apar Industries Limited, Mumbai
3.	Smt. R. Arunjothi	Central Power Research Institute, Bengaluru
4.	Shri P.N. khairnar	Finolex Cables Limited, Pune
5.	Shri Amol Kalsekar	International Copper Association India, Mumbai
6.	Shri Bharat Sehgal	Polycab Wires Private Limited, Mumabi
7.	Shri Ronak Bhatt	RR Kabel Limited, Silvassa
8.	Shri Priten Shah	Shakun Polymers Limited, Vadodara
9.	Shri G.V. Chandra Shekhar	Tata Consulting Engineers Limited, Navi Mumbai
10.	Shri C.S. Mohanty	Universal Cables Limited, Satna

- b) Panel-2 for High voltage cables- above 1100 V and test methods

Sl. No.	Member Name	Organization
1.	Shri C.S. Mohanty (Convenor)	Universal Cables Limited, Satna
2.	Shri P.V.Satheesh Kumar	Central Power Research Institute, Bengaluru
3.	Shri. Ashish Arora	Delhi Metro Rail Corporation Limited, Delhi
4.	Shri Shailesh Patel	Electrical Research and Development Association, Vadodara
5.	Shri Bipin Patil	Finolex Cables Limited, Pune
6.	Shri Avijit Chakraborty	Finolex J-Power Systems Limited, Pune
7.	Smt. Rajani Pande	KEC International Limited, Mumbai
8.	Shri Ajay Kumar Mishra	LS Cable India Private Limited, Rewari
9.	Shri Bharat Sehgal	Polycab Wires Private Limited, Mumabi
10.	Shri Ronak Bhatt	RR Kabel Limited, Silvassa
11.	Shri Sitaraman Rama Prasath	IN PERSONAL CAPACITY



c) Panel-3 for cable accessories and test methods

Sl. No.	Member Name	Organization
1.	Shri Permeet Singh (<i>Convenor</i>)	3 M ELECTRO & COMMUNICATION INDIA PRIVATE LIMITED
2.	Shri Thirumurthy	Central Power Research Institute, Bengaluru
3.	Shri Bipin Patil	Finolex Cables Limited, Pune
4.	Shri Harshal Toriya	Finolex J-Power Systems Limited, Pune
5.	Shri Dinesh Kumthekar	LS Cable India Private Limited, Rewari
6.	Shri R.S. Anekar	Raychem RPG Private Limited, Chennai
7.	Shri Abhijnan Chowdhuri	Axis Electrical component
8.	Shri Sitaraman Rama Prasath	IN PERSONAL CAPACITY

ITEM 4 PRESENT POSITION OF WORK UNDER THE SCOPE OF ETD 09

4.1 The committee noted the information given in the Agenda.

4.2 Document under P-Draft and WC

The committee noted the information given in the Agenda

ITEM 5 TECHNICAL ISSUES

Committee decided to review IS 10810 (part 11) for variation in tensile and elongation calculation as per clause 10.2 and 10.3.

ITEM 6 NEW WORK ITEM PROPOSAL

Sr. No.	Work Item	Decision
1.	Amendment to IS 7098 (part 2)	Committee decided to circulate the doc as p-draft for 30 days, if no comments received doc may be processed for wide circulation for 60 days.
2.	Amendment to IS 16269: 2018	Committee decided to circulate the doc as p-draft for 30 days, if no comments received doc may be processed for wide circulation for 60 days.
3.	Revision of IS 12943 : 1990, harmonizing with IEC 62444	Committee advised panel-3 to submit draft within 03 months.
4.	Part 2 of IS 17293 for working voltages upto 33kV.	Committee decided to consider the proposal after receipt of more information.
5.	Revision of IS 5831:1984 , draft submitted by Shakun polymers	Committee decided to circulate the doc as p-draft for 30 days.



ITEM 7 INTERNATIONAL ACTIVITIES

The committee noted the information given in the Agenda.

ITEM 8 NEW SUBJECTS AND FUTURE PROGRAMME OF WORK

The committee noted the information given in the Agenda.

ITEM 9 DATE AND PLACE OF NEXT MEETING

The date and place of the next meeting shall be decided in consultation with the chairperson.

ITEM 10 ANY OTHER BUSINESS

There being no other business, the meeting ended with a vote of thanks to the Chairperson.

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