# **BUREAU OF INDIAN STANDARDS**

# **MINUTES**

Name of the Committee	No. of Meeting	Day	Date	Tim e	Venue
ETD 39 - Fuses Sectional Committee	19th	Wednesday	16 <sup>th</sup> October 2024	10:30 AM	Hybrid Mode

**CHAIRMAN**: Mr. Manoher Singh Takkher **MEMBER SECRETARY**: Ms. Ankita Tripathi

The list of participants in enclosed at **Annexure A.** 

#### Item 0 WELCOME AND OPENING REMARKS BY THE CHAIRMAN

The Member Secretary welcomed Mr. Manoher Singh Takkher as the new Chairman of the ETD 39 Sectional Committee and expressed confidence that, under his capable leadership and visionary guidance, the committee will successfully achieve its objectives.

Mr. Manoher Singh Takkher welcomed all the members for the 19<sup>th</sup> meeting of the ETD 39 - Fuses Sectional Committee. He appreciated the progress of work undertaken by the committee. He urged all members to actively participate in the committee's work and thoroughly review the documents. He emphasized the importance of careful and detailed evaluations to ensure the highest quality of standards and effective implementation in the industry.

The meeting stated with the brief round of introduction from all the members.

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

The committee confirmed the minutes of the last meeting (18<sup>th</sup> meeting) of the Fuses Sectional Committee, ETD 39 held online on 9<sup>th</sup> May 2024.

# Item 2 COMPOSITION OF THE SECTIONAL COMMITTEE

- **2.1** The committee noted the present composition of the Fuses Sectional Committee, ETD 39 as given at Annexure-1 of the agenda.
- **2.2** The Chairman requested the members to identify other organizations/R and D institutes/Academia who could positively contribute towards the standardization work in the committee and inform BIS so that they can be approached for cooption in the committee
- **2.3** Shri Neeraj Sinha from Havells India had suggested to coopt IIT Bombay in the Committee. It was decided to send a formal letter for cooption to IIT Bombay. Shri Neeraj Sinha was asked to coordinate for the nominations.

#### Item 3 ACTION ARISING OUT OF PREVIOUS MEETING

SI. No.	Item/	Decision Taken in the last	Action/	Decision Taken
1.	Subject Fresh Nomina tions	meeting  Fresh Nominations to be requested from the following organizations:  i. CPRI	Remarks  Updated Nominations received from CPRI, CEA, IEEMA  Updated Nominations	i. The committee again reminded Novateur Electricals and Digital Systems
		ii. CEA iii. Engineers India Ltd. iv. IEEMA. v. Novateur Electricals and Digital Systems Private Limited, Chennai and Legrand India Private Ltd. (being the same organizations, to send revised nominations as a single entity) vi. Western India Switchgears Manufacturer s Association.	pending from the following organizations:  i. Engineers India Ltd.  ii. Novateur Electricals and Digital Systems Private Limited, Chennai iii. Western India Switchgears Manufacturers Association.	Private Limited, Chennai and Legrand India Private Ltd, being the same organizations, to send revised nominations as a single entity within a week.  ii. The committee again reminded Mr. Shashin Shah to send cooption request along with the organization profile of his new organization in prescribed format. Further, he was asked to follow up with Western India Switchgears Manufacturers Association to send updated Nominations.  ii. The committee discussed that Engineers India Ltd is an important organization relevant to the field, and recommended to again follow up with the organization informing the details of their Non-participation in the meeting and updation of

				Nominations, if required.
2.	Cooptions	i. Mr. Shashin Shah to follow up for nominations from M/s Eswari Electricals Private Limited, Chennai and Fuse Gear Electric Ltd ii. The committee also decided to send cooption request to the laboratory ERDA, Vadodara iii. The committee decided to send cooption request to the following electrical utilities:  a) Torrent Power b) Tata power c) CESC, Kolkat a d) BEST Mumb ai	i. Nomination received ERDA ii. Nominations awaited from M/s Eswari Electricals Private Limited, Chennai and Fuse Gear Electric Ltd iii. Nominations awaited from utilities	The Committee noted the same and recommended to follow up for nomination from the Utilities taking help from CEA.
3	Review of IS 9385 : Part 4 : 1983 & IS 9385 : Part 5 : 1983.	It was discussed to reconstitute Panel 1 as follows:  i. Shri P. Jayakumar (Eaton Power Quality Private Limited) (Convener)  ii. Representative from CPRI(to be sought from CPRI)  iii. Representative from Merson India Pvt Ltd. (Shri Jaykumar to follow up for nominations to the panel)  iv. Mr. Nawab Zaidi, Shivshakti Switchgears	Meeting of the panel held on 7th October 2024  Minutes of the meeting/recommendations of the Panel enclosed at ANNEXURE-6	<ul> <li>i. The committee considered the recommendations of Panel 1 on review of IS 9385: Part 5: 1983 and IS 9385: Part 4: 1983 as given Annexure 6 of the Agenda.</li> <li>ii. The committee agreed with the recommendation Panel 1 on review of IS 9385(Part 5): 1983" Specification for high voltage fuses: Part 5 types and dimensions of fuse - Links for current - limiting fuses" that the updated types and dimensions of fuse-links</li> </ul>

v. Shri Sudhnava Marathe, Seimens Limited  The committee strictly advised the panel to review	for current limiting fuses has already been included as Annex D in the revised standard IS 9385 (Part 1): 2018/IEC 60282-1
the documents as per its scope and submit its recommendations with 2 months.	In view of the above, the committee recommended to withdraw IS 9385 : Part 5 : 1983
	ii. The committee agreed with the recommendations of Panel 1 on Review of IS 9385: Part 4: 1983" Specification for High Voltage Fuses Part 4 Determination of Short-Circuit Power Factor for Testing High Voltage Fuses" that the three methods and calculations for Measurement of short-circuit power factor given in the standard are valid and implementable as on date. The standard does not require updation being Test Method/Calculation standard, but may be required for reference by the user. Taking this into consideration, the committee recommended to archive the standard as on date.

4	Review of IS 2086: 1993 & IS 9926: 1981,	It was discussed to reconstitute the Panel 2 as follows:  i. Shri Subhanva Marathe, Simens Limited (Convener) ii. Shri Subhasish, Schneider Electric India Private Limited iii. Mr. Pankaj Solanki, Novateur Electrical and Digitals Systems Pvt. Ltd. iv. Shri P. Jayakumar (Eaton Power Quality Private Limited) v. Shri Nawab Zaidi (Shivshakti Switchgears Private Limited) vi. Mr. Neeraj Sinha, Havells vii. Representative from CPRI(to be sought from CPRI)	Meeting of the Panel scheduled on 15 <sup>th</sup> October 2024.	The member secretary informed the committee that the meeting Panel 2 on Low voltage fuses to Review of IS 2086: 1993 & IS 9926: 1981 was held on 15 <sup>th</sup> October 2024.  The Panel recommended to revise IS 2086" Carriers and bases in rewirable type electric fuses for voltages up to 650 v - Specification" as per the latest practices and incorporating the required safety requirements, as the product is being used considerably in the country.  The committee considered the recommendations of Panel 2 and requested Sh. Neeraj Sinha from Havells India to provide the draft of the revised standard within 2 weeks for further discussion in the Panel 2.  Panel 2 to discusses and put
		Pvt. Ltd.  iv. Shri P. Jayakumar (Eaton Power Quality Private Limited)  v. Shri Nawab Zaidi (Shivshakti Switchgears Private Limited)  vi. Mr. Neeraj Sinha, Havells  vii. Representative from CPRI(to be sought from CPRI)	scheduled on 15 <sup>th</sup> October	as per the latest practices and incorporating the required safety requirements, as the product is being used considerably in the country.  The committee considered the recommendations of Panel 2 and requested Sh. Neeraj Sinha from Havells India to provide the draft of the revised standard within 2 weeks for further discussion in the Panel 2.  Panel 2 to discusses and put up its recommendations in the next sectional committee meeting.  Further, Panel 2 informed the committee that its working on review of IS 9926 'Specification for fuse - Wire used in rewirable type electric fuses up to 650 volts, and will put up its
				7 -

5	Comme	The			The committee noted the
	nts on	info	rmed the committee that		information.
	Finalize	the f	following documents were		
	d	wide	e circulated and no		
	docume	com	ments were received on		
	nts	the	same. Accordingly, the		
			iments were finalized for		
		prin	ting by the committee in		
		_	ast meeting.		
			vever, during the final		
			roval stage of the Division		
			ncil, comments have been		
			ived from Sh. Ashok		
		Kun	nar Rajput, Member		
			wer Systems), Central	Meeting of Panel on High	
		,	etricity Authority and	Voltage Fuses and Panel on	
			irman, ETDC on the	Low Voltage Fuses under	
			iments.	ETD 39 Fuses Sectional	
				Committee held on	
		i.	Doc 18460: (IS 9385	26.07.2024.	
			(Part 1) : 2024: IEC		
			60282-1 : 2020)	The recommendations of	
			'High-Voltage fuses	the Panel enclosed at	
			— Part 1: Current-	ANNEXURE 7	
			Limiting fuses'	1 - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
		ii.	Doc. 21264: IS 9402:	Based on the	
		11.	2024: High-Voltage	recommendations of the	
			Fuses for the External		
			Protection of Shunt		
			Capacitors( First	for publication of the	
			Revision)	standards.	
		iii.	Doc 21267: IS 10624:	startair as:	
		111.	2024/IEC 60644 :	The standards have been	
			2009 + AMD 1 : 2019	sent for printing	
			High-Voltage Fuse-	Semi for primary	
			Links for Motor	The committee may kindly	
			Circuit Applications	note.	
			— Specification ( First	note:	
			Revision)		
		iv.	Doc. 21270 : IS 13703		
		1,,	(Part 4 ) : 2024/ IEC		
			60269-4:2009:Low-		
			Voltage Fuses PART 4		
			Fuse-Links for the		
			Protection of		
			Semiconductor		
			Devices —		
			Supplementary		
			Requirements ( First		
			Revision)		
			/		

The committee recommended	
to discuss the comments for	
resolution in a joint meeting of	
Panel 1 and Panel 2. The	
comments to be circulated to	
the members of Panel 1 and	
Panel 2 in advance for	
examination.	
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#### **Item 4 PRESENT POSITION OF WORK**

The committee noted the present programme of work under ETD 39-Fuses Sectional Committee as given in Annexure 2 of the agenda.

# Item 5 APPROVAL OF DRAFT INDIAN STANDARDS FOR FINALIZATION

The committee noted the information on standards finalized and sent for printing.

#### Item 6 NEW SUBJECTS TAKEN UP FOR STANDARDIZATION

**i.** The member secretary requested the committee members to identify new work items to be taken up for standardization in the future programme of work of ETD 39.

# ii. New Subjects taken up under Annual Programme of standardization(APS 2024-25)

The Member secretary informed that the Indian standard on the subject already exist as IS/IEC 60269-3: 2010 "Low-Voltage Fuses Part 3 Supplementary Requirements for Fuses for Use by Unskilled Persons (Fuses Mainly for Household and Similar Applications) — Examples of Standardized Systems of Fuses A to F". The standard was not visible in the Programme of work of ETD 39 due to some technical error in the BIS portal. However, the same has now been rectified.

In view of the above, the committee recommended that taking up standardization as per this new work item proposal is now not required.

# ITEM 7 INTERNATIONAL ACTIVITIES

- **7.1** The committee noted the information as given in Item 7.1 of the agenda.
- 7.2 The committee noted the programme of work of IEC TC 32 as enclosed as annexure-3 of the agenda.
- **7.3** The committee note the details of voting for IEC TC 32 since last meeting as given in Annexure-4 of the agenda.
- **7.4** The committee noted the new initiatives being taken by BIS for enhancing our participation in the international standardization space as given in Item 7.4 of the agenda.

The committee members were informed that we need to focus now on participating in the making of ISO/IEC standards on the basis of the Level of Interest established in respect of a NWIP or draft standard. The next step would be to designate one or two members of the Sectional Committee to represent BIS for standards categorized as Level H (High) and M (Medium). These designated experts will act as face and voice of BIS for the project at the ISO/IEC level.

The committee finalized the following sub-sector classification of the ETD 39 programme of work.

# **Proposed Sectors:**

Sl. No.	Sub-Sector Sub-Sector
1	High Voltage Fuses
2	Low Voltage Fuses
3	Miniature Fuses

The committee finalized the following level of interest on IEC TC 32, SC 32A and SC 32B current documents under development. Further, based on expertise and interest expressed by the members, the committee designated the following experts against respective documents and corresponding IEC working groups:

S.			Level	TDG.			Designated Experts
No	<b>Project Ref No</b>	Project	of	IEC TC	Working	Existing	
		, and the second	Interest	IC	Group	Experts	
1	32A/360/CD	IEC TR 62655 ED2: Tutorial and application guide for high-voltage fuses	High	IEC SC 32A	MT 6	No	<ul><li>i. Shri P</li><li>Jayakumar,</li><li>Eaton Power</li><li>Quality Private</li><li>Limited, New</li><li>Delhi</li></ul>
2	32B/762/NP	PNW 32B-762 ED1Low-voltage fuses - Part 201: Supplementary and modified requirements and tests for fuses utilization class gG	High	IEC SC 32 B			<ul> <li>i. Shri Nawab Haider Zaidi, Shivshakti Switchgears Private Limited.</li> <li>ii. Shri Vijay Wanwe Siemens Limited, Mumbai</li> <li>iii. Shri Neeraj Sinha, Havells India</li> </ul>
					WG 15	No	
3	32B/760/CD	IEC 60269-100 ED1: Low-Voltage Fuses. Part 100: General requirements and tests	High	IEC SC 32 B			<ul> <li>i. Shri Nawab Haider Zaidi, Shivshakti Switchgears Private Limited.</li> <li>ii. Shri Vijay Wanwe Siemens Limited, Mumbai</li> </ul>
					WG 15	No	

							iii.	Shri Neeraj Sinha, Havells
								India
4							i.	Shri Nawab
							1.	Haider Zaidi,
								Shivshakti
		ISO 24968-1						Switchgears
		ED1Fuse-links for road		IEC				Private Limited.
	32B/741/NP	vehicles - Fuse-links	High	SC 32			ii.	Shri P
		with a rated voltage up to 1000V AC and		В				Jayakumar,
		1500V DC						Eaton Power
								Quality Private Limited, New
								Delhi
					JWG 16	No		
5							i.	Shri P
		IEC 63523 ED1						Jayakumar, Eaton Power
	32/265/CD	High-Voltage DC	High	IEC				Quality Private
	02/200/02	Fuses	111811	TC 32				Limited, New
								Delhi
6					WG1	No	:	Chui Maguai
							i.	Shri Neeraj Sinha, Havells
		IEC 63582 ED1 LOW-VOLTAGE						India
		FUSES: Product data		IEC				
	32B/742/NP	and properties for	Medium	TC			ii.	Shri Vijay
		information exchange		32B				Wanwe, Siemens Limited, Mumbai
					PT			Ziiiiiou, iviuiiioui
					63582	No		

# ITEM 8 DATE AND PLACE FOR THE NEXT MEETING

The committee noted the annual technical committee meeting schedule.

The Chairperson suggested that the next meeting of the committee may be organized in physical mode. The committee agreed to the same

# **Item 9 ANY OTHER BUSINESS**

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

# <u>Annexure 1</u> <u>List of Participants-ETD 39 - 19th TC Meeting of Fuses Sectional Committee</u>

Sl. No.	Orgnization	Member Name
1.	Central Power Research Institute, Bhopal	Shri Manoher Singh Takkher ( <i>Chairperson</i> )
2.	Central Power Research Institute, Bengaluru	Shri Diptiranjan Sahoo
3.	Central Power Research Institute, Bengaluru	Shri Himangshuu Roy
4.	Eaton Power Quality Private Limited, New Delhi	Shri P Jayakumar
5.	Electrical Research and Development Association, Vadodara	Shri Munaf Y Patel
6.	Electrical Research and Development Association, Vadodara	Shri Y.I. Pathan
7.	Havells India Limited, Noida	Ms. Sandhya Arora
8.	Havells India Limited, Noida	Shri Neeraj Sinha
9.	Novateur Electrical And Digital Systems Private Limited,	Shri Rajan Parab
	Chennai	
10.	RITES Limited, Gurugram	Shri Rakesh Gupta
11.	Shivshakti Switchgears Private Limited	Shri Nawab Haider Zaidi
12.	Schneider Electric India Private Limited, New Delhi	Shri Subhasish Nath
13.	Siemens Limited, Mumbai	Shri Vijay Wanwe
14.	Tata Consulting Engineers Limited, Navi Mumbai	Shri P.K.Arunkumar
15.	Tata Consulting Engineers Limited, Navi Mumbai	Shri Sangita Padegaonkar
16.	Western India Switchgear Manufacturers Association, Mumbai	Shri Shashin N Shah
17.	Novateur Electrical And Digital Systems Private Limited, Chennai	Shri Pankaj Solanki