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BUREAU OF INDIAN STANDARDS

Minutes

Name of the Committee	No. of Meeting	Day	Date	Time	Venue
Grid Integration of Renewables Sectional Committee, ETD 46	10 th	Wednesday	18 th September 2024	11 00 hrs	Hybrid (WebEx)

CHAIRMAN: Dr. K. Balaraman

MEMBER SECRETARY: Ms Neha Agarwal

Members Present:

Sl. No	Organization	Member Name
1.	In Individual Capacity	Dr K Balaraman
2.	ETD, BIS	Ms Neha Agarwal
3.	Calcutta Electric Supply Corporation Limited, Kolkata	Shri Rajib Kumar Das
4.	Calcutta Electric Supply Corporation Limited, Kolkata	Ms. Eshita Roy
5.	Central Power Research Institute, Bengaluru	Shri Jeykishan Kumar K
6.	Grid India, New Delhi	Shri Vishal Puppala
7.	IEEE India, Bengaluru	Shri Ravindra Desai
8.	India Smart Grid Forum, New Delhi	Ms. Parul Shribatham
9.	Indian Institute of Technology (ISM), Dhanbad	Shri Sukumar Mishra
10.	Ministry Of Electronics and Information Technology, New Delhi	Shri Om Krishan Singh

11.	Narnix Technolabs Private Limited, New Delhi	Shri Narang N Kishore
12.	Power Research & Development Consultants Pvt. Ltd., Bangalore	Shri Chandrasekhar Atla
13.	Schneider Electric India Private Limited, Gurugram	Shri Surinder Kumar
14.	Schneider Electric India Private Limited, Gurugram	Shri Sivaraman P
15.	Siemens Limited, Mumbai	Shri Vikram Gandotra
16.	Teri - The Energy and Resources Institute, New Delhi	Shri A. K. Saxena
17.	Teri - The Energy and Resources Institute, New Delhi	Shri Mukesh Kumar

Item 0 WELCOME AND OPENING REMARKS BY THE CHAIRMAN

Dr K Balaraman, Chairman welcomed all the members present during the meeting. He congratulated the entire ETD 46 team for finalizing the adoption of IEEE 1547 series. Further, he said that other standards also needs to be developed on fast track in new areas such as micro grids, integration of DERs with electric power systems etc. He requested members for active participation and wished successful discussion on all the agenda items.

Ms Neha Agarwal, Member Secretary welcomed all the members present during the meeting.

The meeting started with brief introduction to all the members present.

Item 1 CONFIRMATION OF THE MINUTES OF THE LAST MEETING

1.1 The committee confirmed the minutes of the 9th meeting of Grid Integration of Renewables Sectional Committee, ETD 46 held on 14th June 2024.

Item 2 COMPOSITION OF SECTIONAL COMMITTEE, ETD 46

2.1 The committee noted the composition of Grid Integration of Renewables Sectional Committee ETD 46 is given in agenda and recommended the following:

a) Write mail to the following organizations for active participation/fresh nominations:

- BSES Rajdhani Power Limited, New Delhi

- Indian Institute of Technology, Madras
- Siemens Limited, Mumbai

2.2 Cooption Request Received-

- Dr B S Negi, (Retd- Sc. G, MNRE), Graphic Era University
- Shri Suesh, PhD Reasearch Scholar, IIT Roorkee
- Shri Ravinder Kumar, Department of Electrical Engineering NIT Uttarakhand
- Shri Anant Milan Khalko, Department of EEE, NIT, Uttarakhand
- Shri Mahendra Venkata Chilukuri, School Of Electrical Engineering, Department Of Energy And Power Electronics, Vellore, Tamil Nadu
- Shri Seshadri Raghavan, The Council on Energy, Environment and Water
- Shri Prabir Barooah, IIT Guwahati
- Ms Sharmeela, Anna University, Chennai

The committee considered all the cooption requests and decided to send invite for the next two sectional committee meetings.

Item 3 ACTIONS ARISING OUT OF PREVIOUS MEETING

Item No of last minutes	Subject	Decision taken during the last meeting	Action Taken	Decision taken during the meeting
3.1	New Subjects and Future Programme of Work	The committee approved the drafts for wide circulation for 15 days time period. If no comments received/comments received editorial in nature, the drafts will be sent for printing with chair approval.	In receipt of no comments, the drafts were sent for printing with the approval of ETD 46 chair. The committee may kindly note.	The committee noted the information.
3.2	International Activity	It was decided to share the WG recommendations with Prof Sukumar Mishra for further examining and expedite the matter.	The report was shared with Prof Sukumar Mishra. The committee may decide further.	To further, expedite the work, it was decided to create a small WG comprising of the following members to review the initial comments given by Grid India: a) Dr K Balaraman b) Shri Sivaraman P c) Shri Abhejeet

				<p>Mohapatra, IIT Kanpur d) Prof SUkumar Mishra, IITISM Dhanbad.</p> <p>WG meeting is proposed to be held in 3rd week of October 2024 tentatively.</p>
3.3	Composition of Sectional Committee, ETD 46	<p>a) seek fresh nominations from BESS</p> <p>b) Seek fresh nominations from IIT Delhi as Prof Sukumar Mishra has now joined IIT(ISM) Dhanbad as director.</p> <p>c) Co-opt the following organizations:</p> <ul style="list-style-type: none"> • Representatives from utilities/DISCOMs (ISGF to share the concerned person's contact details) • CTUIL (Grid India to share the details) • UL India • Prof Ankush Sharma, IIT Kanpur (TERI to share the contact details) • MNRE (ISGF to write to MNRE for seeking their willingness for participation in ETD 46) • ERDA 	<p>a) Mail sent to BESS followed by reminder. Reply is awaited.</p> <p>b) Mail sent to IIT Delhi, reply is awaited.</p> <p>c)</p> <ul style="list-style-type: none"> • Details are awaited from ISGF • Mail sent to CTUIL followed by reminder. Reply is awaited. • Coopted UL India • Mail sent to Prof Ankush Sharma, • Reply awaited from MNRE • Co-opted ERDA. 	The committee noted the information.
3.4	New Subjects And Future Programme Of Work	<p>a) Request to be sent to IEEE for sharing the standard</p> <p>b) Shri Kishore Narang to make detailed presentation during the next meeting.</p>	<p>a) IEEE 2800 on 'IEEE Standard for Interconnection and Interoperability of Inverter-Based Resources (IBRs) Interconnecting with Associated Transmission Electric Power Systems' was circulated to all the members for review. The Committee may discuss.</p>	<p>a) It was decided to wide circulate the IEEE 2800.</p> <p>Meanwhile, it was also decided to create a small working group to assess the IEEE with respect to Indian conditions and to prepare the country specific changes, if</p>

			<p>b) Shri Narang may share presentation on 'Grid connected solar rooftop PV'</p>	<p>any:</p> <p>a) Shri Ravindra Desai, IEEE</p> <p>b) Shri Chandrasekhar Atla, PRDC</p> <p>c) Shri Sivaraman P, Schneider Electric India</p> <p>d) Shri Jeykishan Kumar K, CPRI</p> <p>e) Shri Vishal Puppala, Grid India</p> <p>The group may kindly review the standard and submit the findings.</p>
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Item 4 NEW SUBJECTS AND FUTURE PROGRAMME OF WORK

4.1 The committee noted the information.

Item 5 APPROVAL OF DRFAT INDIAN STANDARDS FOR FINALIZATION/WC

The committee noted the information

Item 6 INTERNATIONAL ACTIVITIES

6.1 The committee noted the present position of work of the corresponding IEC Technical Committee IEC/SC 8A and IEC/SC 8B.

6.2 Member Secretary informed that the following Indian delegation participated in the IEC SC 8A and IEC SC 8B meeting held during 16-17 September 2024 at Paris:

- a) Dr Om Krishan Singh, MietY (In-person)
- b) Ms Neha Agarwal (Online)

Dr Om Krishan Singh briefed the committee regarding the work progress at IEC in the area of grid integration. Further, he suggested to propose a new subject to IEC SC 8B on 'Cybersecurity aspects of DERs' The committee agreed on the same.

The committee requested him to submit a detailed concept note on the proposed subject so the same may be examined and submitted to IEC for further necessary actions.

6.2 Designation of Indian Experts at IEC Projects:

- The committee noted the information.
- It was decided to identify sectors within the scope of work of ETD 46 to designate experts in a particular sector and to assign IEC documents for examining and preparing Indian viewpoints for submitting to IEC.
- The members were requested to give their suggestions for identifying sectors over the WhatsApp group. Further, they were also requested to nominate themselves based on their expertise/interest.

Item 7 DATE AND PLACE FOR THE NEXT MEETING

Annual Meeting calendar: The committee noted the annual meeting calendar. It was also proposed to have another meeting in December 2024 (Q3) tentatively.

Item 8 ANY OTHER BUSINESS

In view of no other business, the meeting ended with vote of thanks to chair and all the members present during the meeting.

ANNEX -1
Composition ETD 46

S. No	Organization	Member Name	Member Email	Mobile	Role
1.	IN INDIVIDUAL CAPACITY	Dr K Balaraman	balaraman@rediffmail.com	9448863005	Chairperson
2.	BSES Rajdhani Power Limited, New Delhi	Shri Abhishek Ranjan	Abhishek.ranjan@renewpower.in, AbhishekbSES2017@gmail.com	9555290403	PM
3.	Bharat Heavy Electrical Limited, New Delhi	Shri Aruna Gulati	arunag@bhel.in	9810682176	AM
4.	Calcutta Electric Supply Corporation Limited, Kolkata	Shri Rajib Kumar Das	rajib.das@rpsg.in	9163358038	PM
		Ms. Eshita Roy	eshita.roy@rpsg.in	9163396620	AM
5.	Central Electricity Authority, New Delhi	Shri Priyam Srivastava	priyam_cea@nic.in, ce-rndcea@gov.in	9717650473	PM
		Shri Arjun Agarwal	arjun.cea@gov.in, ce-rndcea@gov.in	8052758666	AM
6.	Central Power Research Institute, Bengaluru	Shri Jeykishan Kumar K	jeykishan@cpri.in	9953795473	PM
7.	GE Power India Limited (Alstom Project India Limited), Noida	Shri Rohit Poddar	rohit_poddar@alstom.com	0120-4790971	PM
8.	Grid India, New Delhi	Shri V. Balaji	vbalaji@posoco.in, balaji.velury@gmail.com	9449599158	PM
		Shri Vishal Puppala	vishal.puppala@grid-india.in		AM
		Smt Pushpa S	pushpa@grid-india.in		AM
9.	IEEE India, Bengaluru	Shri Ravindra Desai	ravindra.desai@ieee.org	9898155145	PM
10.	Indian Institute of Technology	Dr Sukumar Mishra	sukumar@ee.iitd.ac.in, sukumariitdelhi@gmail.com	9810429715	PM
11.	India Smart Grid Forum, New Delhi	Reji Kumar Pillai	reji@rejikumar.com, rejipillai@indiasmartgrid.org	9811548584	PM
		Parul Shribatham	parul@indiasmartgrid.org	9810878505	AM
		Shri Anand Singh	anand@indiasmartgrid.org		AM
12.	Indian Electrical and Electronics Manufacturers Association, New Delhi	Ms. Pragati Sohoni	pragati.sohoni@ieema.org	9820071173	AM
		Shri Kumar Rahul	kumar.rahul@ieema.org	8789098209	PM
13.	Indian Institute of Technology Madras,	K Shanti Swarup	swarup@ee.iitm.ac.in	9840829827	PM

	Chennai				
14.	Ministry of Electronics and Information Technology, New Delhi	Shri Om Krishan Singh	om.krishan@meity.gov.in	9015170278	PM
15.	Ministry of New and Renewable Energy, New Delhi	Dr Rajesh Kumar	rajesh.mnre@gov.in, rajesh_kumar66@rediffmail.com	9711597084	PM
16.	NTPC Limited, New Delhi	Shri S.K. Lal	sklal@ntpc.co.in	9650049099	AM
		Shri V. Rao Bitra	bvrao01@ntpc.co.in	8333809081	PM
17.	Narnix Technolabs Private Limited, New Delhi	Shri Narang N Kishore	kishor@narnix.com	9810163990	PM
18.	National Hydroelectric Power Corporation, Faridabad	Shri Prakash Chand Sharma	pcsharma@nhpc.nic.in	8894788339	PM
		Shri Shubhra Shah	shubhrashah@nhpc.nic.in	9810370810	AM
19.	National Institute of Wind Energy, Chennai	Sh. A. Senthil Kumar	asenthilkumar.niwe@nic.in	9445798006	PM
20.	Power Research & Development Consultants Pvt. Ltd., Bangalore	Shri Chandrasekhar Atla	csreddy@prdcinfotech.com		PM
21.	Schneider Electric India Private Limited, Gurugram	Shri Surinder Kumar	Surinder.Kumar@se.com, surinderbarawal@gmail.com	9560400828	PM
		Shri K. Ajith Kumar	ajith.kumar@se.com	9880187859	AM
22.	Siemens Limited, Mumbai	Shri Bidyut Mazumder	bidyut.mazumder@siemens.com	9000143265	AM
		Shri Vikram Gandotra	vikram.gandotra@siemens.com	9811110288	PM
23.	TERI School of Advanced Studies, New Delhi	Shri A. K. Saxena	ak.saxena@teri.res.in	9654366166	PM
		Shri Mukesh Kumar	mukesh.kumar@teri.res.in	8955513232	AM
24.	Tata Power Delhi Distribution Limited, New Delhi	Shri Lalit Wasan	lalit.wasan@tatapower-ddl.com		PM
25.	Tata Power Limited, Mumbai	Shri Rohit Gupta	rohitgupta@tatapower.com	7208407811	AM
		Shri Raj Kumar Rastogi	rajkumar.rastogi@tatapower.com	9871800507	AM
		Shri Rajiv Samant	rajivsamant@tatapower.com	9930338316	PM