

Yi Guo

Guests (New and Old)

Dimitry Gilbert

Ernest Gallo

Power & Energy Society	8							
PSCC Subcommitte	e WebEx	Virtual Meeti	ing Min	utes - FINAL				
()	Name: IEEE Fibe	r Optics Subco	mmittee					
Meeting Location: Teams		Meeting Time 09 AM-12:00	: PM-EDT	Meeting Date: 2022/12/13	Minutes Rev	vised: Minutes Approv 2023/04/1		
Presiding Officer: Chair: Delavar Khor Vice Chair: Corrine Secretary: John Jones	Dimnik, (absent)	•	• •					
Attendance: Total at	tendees =	Guests (M: Me	ember, C	M: Corresponding	g Member, G:	Guest, I:	IEEE)	
			Affiliat	ion		(P) / V	ing via Phone Veb (W) or (L)/ Absent (A)	M/CM/ G/I
Austin Farmer			AFL			A		M
Jaclyn Whitehead			AFL			A		M
Mark Naylor			AFL			A		M
Marie Henshaw			AFL	L		W		M
Peyton Campbell			AFL	AFL		A		M
Robert (Bob) Kluge			ATC - F	ATC - Retired		W		M
Mike Warntjes			ATC	ATC		A		M
Corrine Dimnik			Kinecti	Kinectrics		W - host		M
John Jones			PLP	PLP		W		M
Jacob Palmer			PLP		?		M	
Josep Martin Regala	do		Prysmian			W		M
Paul Baird			Prysmian			W		M
Felix Chen			ZTT China		W		M	
Jack Roughan			ZTT China		W		M	
Linda Cai			ZTT China		W		M	
Lemon Lu			ZTT China		W		M	
Gabriel Okafor			HPS	HPS		W		M
Tewfik Schehade			Indepe	ndependent Consultant		W		M
Delavar Khomarlou			Hydro	lydro One Networks		W		M
Brett Boles So		Southe	outhern Company		W		M	
		Southe	rn Company		A		M	
Christopher E. Roye	r		AEP	-		?		M
Mike Riddle			Incab			W		M
Monty Tuominen MW7		MWT (Consulting LLC -BP (Retired)		W		M	
			IEEE ((liaison)		A		I
Emma Fulina			_	nghai Electric Cable Research				М

PSCC Committee Minutes of Meeting

Institute (SECRI)

Incab

Ericson

Shanghai Electric Cable Research

M

G

Α

W

Christian Riddle	Incab	A	G
Andrew Cresswell	Hubbell	W	G
Yongxin	ZTT	A	G
Jeff Wang	ZTT	A	G
Donna Pericolosi	ATC	W	G
Jared Smith	AEP	A	G
Dan Baggett	AFL	A	G

Note:

 $G\rightarrow M$: Guest is eligible to become member if requested.

Item no.	Notes	Action by
CALL TO ORDER	December 13, 2022 09:05 AM	D.
		Khomarlou
INTRODUCTIONS	Quorum With $15/25$ members and 2 guests on Teams, no IEEE representative in this	
AND QUORUM	meeting. More than 50 % of members.	
CHAIR'S REMARKS	Teams Meeting. Face to face meeting for March 2023 is expected	D.
	IEEE SA Copyright policy for WG/subcommittee members was presented briefly. The Copyright presentation will be attached to these minutes for future reference.	Khomarlou
	Members need to confirm iMeetCentral IEEE copyright policy or their iMeetCentral access may get suspended. Please let chair know if you don't have membership to iMeetCentral.	
	Chair presentation attached below (for your reference.	
	New approach to updating standards. • IEEE 1222 All Dielectric Self-Supporting Cable (responsible for 1222 ADSS cable) and IEEE 1591.2: ADSS Attachment Hardware	
	 IEEE 1138 Optical Ground Wire (responsible for 1138 OPGW cable) and IEEE 1591.1: OPGW Attachment Hardware 	
	• IEEE 1594 Helically Applied (Wrapped) Fiber Optic Cable (1594 cable and 1591.3 attachment hardware)	
	IEEE 1595 OPPC (1595 cable and 1591.4 attachment hardware)	
	Technical Lead and support from volunteers – less formal – small subcommittee This avoids working group regimental structure (Chair and vice chare for each grouptraining required).	
	PAR Rules. New rule – must allow publishing time "approximately 4 months" before the PAR deadline.	
	123 sign-up was discontinued. Replacement is software <i>MemberPlanet</i> – Planned for 2023 and I will inform members.	
	New Chair & Vice Chair the next meeting.	
	Subcommittee officers need help since we are overwhelmed with our own work. Chair and Vice-chair two-year terms are complete at the end of this meeting. Need to find replacement by March 2023 meeting at the latest.	
	Need one person to represent PSCCC-F0 in awards committee Need one person for vice-chair position. Need one person for chair position.	
	Corrine Dimnik, John Jones and I will maintain mailing list for all members and can send documents/info. For privacy, group emails will be sent as Blind Carbon Copy (BCC). We will include names and association (minus emails) in our correspondence and minutes.	
AGENDA	Agenda for the December 13, 2022 virtual meeting was sent to all members prior to	
APPROVALOR	the call. The agenda was approved in this meeting.	Khomarlou
APPROVAL OF PREVIOUS MINUTES	Draft Minutes of September 27-28, 2022 virtual meeting have been placed in iMeetCentral and sent to members. Minutes were approved in the meeting.	Khomarlou
MINUTES	These minutes will be posted in the IEEE PSCCC website as Final for public access.	L

Item no.	Notes	Action by
IEEE 1138 News	IEEE 1138 has been placed on nomination list for PES award	Corrine
		Dimnik
IEEE 1591.3 and	Discussed briefly in this meeting. Chair asked Marie Henshaw (AFL) to check with	Mark
1594 Wrap Cable	Mark Naylor (also AFL) if he = or someone he designates - can support standard efforts on the Helically applied cable system. We haven't heard from Mark in a while and at the moment, there aren't many helically applied cable and attachment hardware suppliers.	Naylor
	Retirement of TIA-455-30 and replacement with TIA-455-204 applies to these two standards as well.	
	IEEE 1594 and 1591.3 Radio Interference Voltage (RIV) & noise: Currently these standards call on standard BS5049 Part 2 (CISPR). 1591.3 calls on IEC 61284 and there is a corresponding ANSI/NEMA CC-1. IEEE has the standard IEEE 1829-2017. Could we harmonize all our standards to either call on IEC or IEEE standard with respect to RIV&Noise clauses. Jack checked IEEE 1829 and it only referenced the CISPR standard. This will need to be incorporated into 1591.4 as well. He will investigate if there is a substitute standard that we can use for	
	RIV&Noise limits as well as measurements.	
IEEE 1595	Congratulations J. Roughan's leadership on IEEE 1595 OPPC standard. We received	Iosep
	notification of impending publication on June 20, 2022. Corine to follow up with	Martin
OPPC->Publication		Linda Cai/ Jack
	In the next version of IEEE 1595, we may need to add information and tests regarding preforming and dead-ends. A statement that the dead-end rating is transferable to OPPC cables of lesser rated designs.	Roughan
1591.1 OPGW	9	J. Jones/B.
hardware		Kluge
	Corrine and John initiated the IEEE 1591.1 Balloting process in early November 2022. Working to iron out the problem of ballot approval for 1591.1 so we can proceed with uploading of the document. The invitation has been open since December 3, 2022, but we will likely ask for extension of the closing date.	
	1591.1 PAR extension has been approved until Dec. 2023.	

Item no.	Notes	Action by		
OPPC Hardware	1591.4 OPPC Hardware draft discussion. The final vote on this standard was	L. Cai/		
1591.4	postponed to April meeting and once the members have had enough time to read the updated draft.	J. Roughan		
	The new draft with changes from September meeting will be uploaded to iMeetcentral and sent to members prior to April meeting.			
	Some of the discussion in the meeting centered on the following:			
	Need to add method for testing at operating current. Jack to follow up. Test at maximum operating current.			
	Check – isolating the and 1591.3 – what is done. May be confidential to each manufacturer			
	5.5.6 – Corona & RIV clause added. Direct from IEC 61284. Should we have an IEEE standard to cover this for line hardware. Jack will check with the overhead committee chairman (Nancy from AEP). Del indicated it was acceptable to reference IEC. Maybe IEEE 1829-2017. The Wrap hardware 1591.3 standard refers to a British standard #BS-5049.			
	Standard is how the measurements are done. CISPR 18-2. NEMA CC-1. He will investigate if there is a substitute standard that we can use for RIV&Noise limits as well as measurements.			
	Jack Roughan checked IEEE 1829-2017 to compare IEC 61284 and it only references CISPR. Maybe in the induction standard. Jack will investigate further if there is a substitute standard that we can use for RIV&Noise limits as well as measurements.			
	Temperature rise test was deleted based on the requirement for resistance of repair rods to be less than the conductor.			
IEEE 524 liaison	PSCCC-F0 will provide the sheave guideline for IEEE 524 July meeting. Jack Roughan will represent PSCCC-F0 to the IEEE 524 and provide the information.	NA		
	From Previous meeting in December 2021 (background info):			
	Jack Roughan and Bob Kluge will jointly work as liaison PSCCC-F0 to IEEE 524.			
IEEE 1591.x Task	From Josep, there is an IEC Technical Report (TR-2016): Guidelines for installation on Optical fiber cable that may be used as our guide for the work PSCCC-F0 undertakes for IEEE 524, should they accept. Jack Roughan is leading the group. Nothing new to report	J. Roughan		
Force Group	Background information from previous meetings.	, 0		
	Optical monitoring will be reviewed within 1591.x group for later inclusion in all 1591.x standards			
	The purpose of the group is to try to harmonize all 1591.x hardware standards for different types of cables. Group is still open to accepting new members – a number of people in the meeting expressed interest.			
	Current membership is 13: Jack Roughan, Linda Cai, Lemon Lu, Josep Martin Regalado, Tewfik Schehade, John Jones, Mark Naylor, Del Khomarlou, Corrine Dimnik, Denise Frey, Dan Baggett, Peyton Campbell, Gabriel Okafor.			

Item no.	Notes	Action by
IEEE 525 and	Nothing new to report on IEEE 525.	D.
PSCCC E0 Liaison	General Comment: IEEE 525 work doesn't have many interaction points with PSCCC-F0, except that they deal with fiber optic cables inside substation environment.	Khomarlou
	IEEE 525- DKH - Cables within substation - Reference IEEE 1138 and 1222 Grounding in substations Utility members are good candidates to become Liaison.	
	Ernie Gallo who is the vice-chair of E0 provided background information on E0 areas of responsibility.	
	E0 is working towards: Revise IEEE 367. Methods of GPR calculation. GPR input. Limited members – need further assistance with GPR.	
	Fiber optics within substation – does not impact our Overhead applications	
IEC Liaison	Liaison Report - PEP	Josep
ITU Liaison	- IEC meeting in San Francisco in October 2022. IEC plans to break IEC 60794-1-2 to several standards under different sub-standards of: 60794-1-21: Mechanical	Martin Regaldo
	60794-1-21: Mechanical 60794-1-22: Environmental 60794-1-23: Cable Elements 60794-1-24: Electrical	
	Josep provided a valuable IEC status report table which shows current IEC standards related to PSCCC-F0 work in a table which is placed in this document under meeting material heading.	
IEEE 1222	No New item for IEEE 1222.	P. Baird
Sheave Size Recommendation/ IEEE 524	The document was finalized and presented to IEEE 524 by Jack Roughan. Jack to further discuss with IEEE 524 Cody Davis PSCCC-F0 preference to include the entire guideline complete with ADSS which forms a big portion of this work. There will be more discussions in January 2023 meeting with IEEE 524 and perhaps PSCCC-F0 can pitch the idea of writing a larger portion of IEEE 524 for their use.	
	Background Info from previous meeting: Cody Davis is worried about including all things for 524. General feeling was that ADSS was not to be included. However – ADSS is already covered in this standard. Latest revision of IEEE 524 is 2016. A new one is beginning with a goal 2025.	

Item no.	Notes	Action by
Preforming	This item was not discussed and is placed here only for reference.	
Concern - OPGW,		
OPPC	Preforming is a standard part of cabling. Critical in outside layer to help contain the wrap if damaged. Pass/Fail for routine test requirement. Could be added to next update for IEEE 1138. It may be covered by other standards that are referenced.	
	IEEE 1138 standard may need to be updated in the next cycle with information on preforming wire. IEC 61089 – covers preforming wires. There are other standards that have similar wording.	
	Add test to 1138 and 1595.	
	IEEE 1595 OPPC: In the OPPC standard- regarding dead-ends, a statement that the dead-end rating is transferable to OPGW cables of lesser rated designs.	
Presentation	None in this meeting.	

New /Other Business

Discussion on writing a new technical guide which describes any new type test, factory or field testing for aerial cables (all fiber cables or perhaps only aerial cables) used in sensing applications. The proposed title (subject to approval/edit by members) is: Technical Guide for Fiber Optic Strands in Aerial Fiber Optic Cables for Sensing Applications.

Items to consider:

- Are there advantages to test cables in factory/type test setting when they are used for sensing applications?
- Tests required for cables/fiber strands used for Raman temperature sensing application
- Tests required for cables/fiber strands used in Brillouin strain and temperature sensing applications.
- Distributed Acoustic sensing
- Testing of multimode fibers used in Raman sensing at 1092 nm and 1550 nm. How can this be done when there is no test equipment (e.g. MM at 1550 nm)?

Ernie Gallo has written a number of articles on fiber optic cable installation which he is sharing with the group. The links to these papers are:

Don't Leave It Up in the Air | ISEMAG Your Fiber Checklist | ISEMAG

Brief discussion on some of the ideas for new study group with the aim to produce a technical report for PES. Items discussed in this meeting were with respect to developing a technical report on this End of Life of aerial cables.

OPPC/OPGW/ADSS/Helical End of Life Determination Tests

- PSCCC-F0 is considering forming a study group (Power Engineering Society template) with our group.
- Please notify chair/vice if you wish to be excluded. All others in the committee assumed to participate.
- Technical report to pull together the information for multiple sources. Can we
 do something regarding OPPC/OPGW/ADSS/Skywrap End of Life
 Determination.
- Could PSCCC-F0 study group develop a technical to quantify when EOL is approaching.

Some of the items to consider in this regard are:

- Information/reports on ADSS ageing from the Accelerated ageing chamber formerly at Arizona state university (Dr. Karaday) - Monty to provide a briefing to the subcommittee on what can be learned from these resources/tests.
- Utilities Telecom Council (UTC) paper on OPGW and ADSS fiber ageing utility
 members may be able to get this expensive report and see if it has any value
 for our work which is mostly the final report on a comprehensive survey from
 UTC members.
- Study of pollution on ADSS and its effects on ageing
- Fiber /optical unit ageing
- Metallic component ageing/premature failure/corrosion

Can we make an ad-hoc technical group to study fiber ageing? What would be our output and where would it get published/noticed? Chair to ask for clarification from A0 parent committee.

Item no.	Notes	Action by
item no.	ivutes	ACHUII DY
	 Navigational Marker Balls – potential added section for OPGW applications. Anti-Galloping devices Splice Boxes for Aerial cables - There is already an ITU standard. Isolated OPGW – Live-line installation Underground/Submarine embedded fiber power cables - Josep Martin Regaldo (pep) has searched through IEEE SA website and didn't find any standard or subcommittee in IEEE tasked with this work. 	
	Splice Boxes for Aerial cables- PSCCC-F0 has been considering writing a comprehensive standard on this item. Pep mentioned that IEC has many documents on splice boxes for aerial cables and their associated tests. ITU has a standard to consider. ITU-T L.201/L.13. Performance requirements for passive optical nodes: Sealed closures for outdoor environments. Underground/Submarine embedded fiber power cables Chair has searched for IEEE subcommittee/working group that deals with this topic,	
	but hasn't found any. If anyone knows please let us know.	
ITEMS REPORTED	NA	
OUT OF EXECUTIVE SESSION		
CLOSING	Please let chair know if you don't yet have access to iMeetCentral.	
TIME OF FINAL ADJOURNMENT	Meeting was adjourned on December 13, 2022 at 12:30 PM EDT.	
NEXT MEETINGS	The next Meeting will be a face-to-face meeting in Charlotte, NC.	
	We will confirm the meeting date and location by third week of January 2023 through email to all members.	
	Meeting Details: April 12-13, 2023: Start on April 12 at NOON – 6:00 PM (EDT) to allow for travel. April 13, 2023 at 400 PM (EDT) Finish (or earlier) again to allow for travel.	
	Hotel: Wingate by Wyndham CLT Airport I485/I85 4238 Business Center Drive, Charlotte, NC 28214 P: (704) 395-3600 / D: (704) 918-1769	
MATERIAL TO PE	We will finalize the hotel rates and conference room contribution required.	
MATERIAL TO BE	IEEE Copyright statement (included in this document)	
PLACED IN	2. IEEE Patent and duty to inform clause (included in this document)	
iMeetCentral	3. Chair Presentation – December 2022 (included in this document)	
And / or	4. Report from Ernest Gallo - Ericsson	
Attached	5. Corning Paper (public domain) on Mechanical reliability.	
	6. Incab Presentation on selecting fiber 101 - If permission granted by Incab.	

IEC SC86A WG3 (Optical Cables) Liaison report Dec 2022



IEC SC86A WG3 meeting hold on Oct 29th-31st 2022 in San Francisco (CA). 42/102 members attended

RELEVANT TOPICS TO IEEE PES PSCCC-FO GROUP

Status of roll-out plan for IEC 60794-1-2 (optical cable test procedures)

Standard	Required	Published	CD/CDV	Draft	Deleted	To Start
-1-21 (mechanical)	35	0	0	7	4	24
-1-22 (environmental)	20	4	2	10	4	0
-1-23 (cable elements)	12	1	9	1	1	0
-1-24 (electrical)	4	4	0	0	0	0
Total	71	9	11	18	9	24

→ 1-24 is withdrawn

· Stability dates of published relevant standards

Publication Number	Standard	Publication Date	Stability Date
IEC 60794-1-219:2021 ED1	Material compatibility	2021-11-22	2024
EC 60794-1-220:2022 ED1	Salt spray corrosion	2022-03-04	2025
EC 60794-1-401:2021 ED1	Short-circuit	2021-07-27	2024
EC 60794-1-402:2021 ED1	Lightning	2021-07-27	2024
EC 60794-1-403:2021 ED1	Electrical continuity	2021-04-26	2024
EC 60794-1-404:2022 ED1	Current temperature test	2022-02-10	2025
EC 60794-4:2018 ED2	Aereal cables for OHTL	2018-06-25	2024
EC 60794-4-10:2014 ED2	OPGW	2014-10-29	2024
EC 60794-4-20:2018 ED2	ADSS	2018-08-28	2024
EC 60794-4-30:2021 ED1	OPPC	2021-04-07	2024
EC TR 62691:2016 ED2	Guidelines to the installation of optical fibre cables	2016-06-24	2024

Next meeting: Spring 2023 - May 10-12th 2023 in Kyoto, Japan.

Committee draft for comments (CD) / Committee draft for vote (CDV) / Final draft international standard (FDIS)

Meeting Material

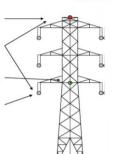
WHAT FIBER CABLES PSCCC-FO IS CONCERNED ABOUT? DIFFERENT TYPES OF AERIAL FIBER AROUND THE WORLD TODAY

- ancheste
- · OPGW, Optical ground wire
- · Wrap on phase or ground wire
- Lash on phase or ground wire
- · MASS, Metallic self supporting
- · ADSS, All dielectric self supporting
 - · OPPC, Optical Phase conductor

OFFC, Optical Friase conductor

There are fewer options if bundled conductors are present

age 2

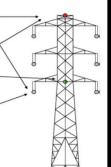


WHAT FIBER CABLES PSCCC-FO IS CONCERNED ABOUT? DIFFERENT TYPES OF AERIAL FIBER AROUND THE WORLD TODAY

- · OPGW, Optical ground wire
- · Wrap on phase or ground wire
- · Lash on phase or ground wire
- MASS, Metallic self supporting)
- ADSS, All dielectric self supporting
- OPPC, Optical Phase conductor

There are fewer options if bundled

conductors are present



IEEE FIBER OPTIC SUBCOMMITTEE PAR EXTENSION REQUEST

REVCOM in November 2022 approved extension of PAR 1591.1 Standard for Testing and Performance of Hardware for Optical Ground Wire (OPGW) by one year to December 30, 2023.

IEEE FIBER OPTIC SUBCOMMITTEE INTRODUCTION

Currently Delavar Khomarlou, Hydro One Inc. is Chair. Corrine Dimnik, Kinectrics Inc. is vice-chair, John Jones, PLP Inc. is the Secretary. W2-year terms are now past due.

Part of IEEE Power Engineering Committee. PSCCC-F0 had several working groups reporting in at every meeting. PSCCC-F0 structure has been changed and all working groups have been combined following March 2022 meeting.

Areas of responsibility are as follows, with each area spearheaded by a technical leader. The new Structure of the Subcommittee is as below:

- IEEE 1222 All Dielectric Self-Supporting Cable (responsible for 1222 ADSS cable) and IEEE 1591.2: ADSS Attachment Hardware
- IEEE 1138 Optical Ground Wire (responsible for 1138 OPGW cable) and IEEE 1591.1: OPGW Attachment Hardware
- IEEE 1594 Helically Applied (Wrapped) Fiber Optic Cable (1594 cable and 1591.3 attachment bardware)
- IEEE 1595 OPPC (1595 cable and 1591.4 attachment hardware)

All standard drafts will be reviewed in subcommittee meetings.

PSCCC-F0 Q4 2022 ACCOMPLISHMENTS/GOALS /UPDATE (1/2)

Accomplishment

IEEE 1595 OPPC standard published in November 2022. Congratulations to all involved.

Other Work:

IEEE 1591.1 OPGW hardware voted out of subcommittee in March 2022. Balloting didn't start in November 2022 as planned due to IEEE support issues. Will start Balloting as soon as possible.

Optical Phase Conductor (OPPC) attachment hardware standard: 1591.4 PAR is valid until December 2023. Hope to get it voted out of subcommittee in December 2022 meeting (this meeting).

IEEE 1594 and 1591.3 Radio Interference Voltage (RIV) & noise: Currently these standards call on standard BS5049 Part 2 (CISPR). 1591.3 calls on IEC 61284 and there is a corresponding ANSI/NEMA CC-1. IEEE has the standard IEEE 1829-2017. Could we harmonize all our standards to either call on IEC or IEEE standard with respect to RIV&Noise clauses.

PSCCC-F0 Q4 2022 ACCOMPLISHMENTS/GOALS /UPDATE (1/2)

ccomplishment:

IEEE 1595 OPPC standard published in November 2022. Congratulations to all involved.

Other Work:

IEEE 1591.1 OPGW hardware voted out of subcommittee in March 2022. Balloting didn't start in November 2022 as planned due to IEEE support issues. Will start Balloting as soon as possible.

Optical Phase Conductor (OPPC) attachment hardware standard: 1591.4 PAR is valid until December 2023. Hope to get it voted out of subcommittee in December 2022 meeting (this meeting).

IEEE 1594 and 1591.3 Radio Interference Voltage (RIV) & noise: Currently these standards call on standard BS5049 Part 2 (CISPR). 1591.3 calls on IEC 61284 and there is a corresponding ANSI/NEMA CC-1. IEEE has the standard IEEE 1829-2017. Could we harmonize all our standards to either call on IEC or IEEE standard with respect to RIV&Noise clauses.

PSCCC-F0 Q3 2022 ACCOMPLISHMENTS/GOALS /UPDATE (2/2)

New Business - Study Group

Let's start a study group to create a PES Technical Report on an area of interest. An area of interest is Aerial cable (OPGW, ADSS, OPPC, Helically Applied) End of Life Determination Tests) end of life considerations.

Study Group formation and technical report must be approved by subcommittee members.

Study Group formation and technical report must be approved by Main PSCC committee (chair's understanding).

Template available from PES website. Final report sent to PES for Publication

Page

PSCCC-FO CALL FOR OFFICERS/VOLUNTEERS

(WE ASK THIS AT EVERY MEETING, BUT NOBODY STEPS UP)

Being an Officer of the subcommittee/working group is a rewarding experience. It looks very good on your resume, especially if you are a young(er) engineer.

The chair and vice-chair are currently overloaded. PSCCC-F0 urgently needs members to step up for the following officer positions:

- · Representative to A0 awards Committee
- Vice-Chair and Chair (two positions)
- Assistant to vice-chair (on track to become Vice-chair /Chair)

Per P&P manual, all positions are time-limited (2 years) unless you get re-elected or get re-appointed.

PSCCC-FO MEMBERSHIP GUIDELINES

- 1. Subcommittee (SC) members must be IEEE members.
- Need to attend meetings in order to maintain subcommittee membership. If you have a reason to miss a meeting, please let one of the officers know.
- Corporate membership (i.e. having one person from a corporation attend and update others within the roster from that company) is not supported by IEEE, but there is flexibility.
- 4. Members who are not attending meetings (without legitimate reason) or have lost interest or moved on to other positions could ask / have their membership changed to corresponding members or become "Past-Member". If SC officers' initiate the change, they will try to contact the member and give ample time.
- 5. Members can be re-instated if they wish.
- Guests are allowed. Need to attend 2 consecutive meetings and ask on third meeting (with no more than one consecutive "unexcused" missed meeting) before eligible for membership.

STANDARDS ASSOCIATION (SA) STRUCTURE AND DEFINITIONS (FROM SA SITE)

- What is A0: A0 is a gathering of the parent committee PSCCC chair, vice-chair, secretary and past chair as well as all subcommittee (and some Working group) chairs/ vice-chairs. A0 meets every other Friday.
- What is a PAR (Project Authorization Request): A PAR is a document that states the reason for the project and what it intends to do. Upon submission, each PAR is placed on an upcoming New Standards Committee (NesCom) agenda pending Standards Committee approval.
- NesCom Responsible for ensuring that proposed standards projects are within the scope and purpose of IEEE, assigned to the proper Society or other organizational body, and interested parties are appropriately represented in the development of IEEE standards.
- 4. RevCom- Makes recommendations on the approval or disapproval of standards submitted for IEEE SA Standards Board approval or adoption. Approval or adoption requires agreement from RevCom members that RevCom and IEEE SA Standards Board procedural requirements have been satisfied.

Minutes of meeting (continued)
Page 13 of 16

MAINTENANCE SCHEDULE FOR STANDARDS UNDER PSCCC-F0

	DUE	STANDARD	STANDARD TITLE	LAST	ACTION	COMMENTS
PRIORITY	DATE	NUMBER		PUBLISH ED	(DEV / REVISION /	
TY				DATE	COMMENTS ONLY	
	New PAR submitted June 2024	IEEE-1138- 2021	IEEE Standard for Testing and Performance for Optical Ground Wire (OPGW) for Use on Electric Utility Power Lines	2021	Published in 2021	Published in November 2021.
	No Active PAR Published in 2020	IEEE 1222- 2011	IEEE Standard for Testing and Performance for All-Dielectric Self-Supporting (ADSS) Fiber Optic Cable for Use on Electric Utility Power Lines	2020	Published 2020	Published 2020
	No Active PAR. Published in 2020	IEEE 1594- 2008	IEEE Standard for Helically Applied Fiber Optic Cable Systems (Wrap Cable) for Use on Overhead Utility Lines	2008		Published in 2020
1	Active PAR.Ext PAR to Dec. 2022	IEEE 1595- DRAFT	Draft Standard for Testing and Performance for Optical Phase Conductor (OPPC) for Use on Electrical Utility Power Lines		Standard is in IEEE publication process via REVCOM	Expect to be sent to IEEE for publication in Jan 2022.
2	Active PAR Ex. Dec. 2022	IEEE 1591.1- 2012	IEEE Standard for Testing and Performance of Hardware for Optical Ground Wire (OPGW)	2012		
	No Active PAR Published in 2020	IEEE 1591.3- 2011	IEEE Standard for Qualifying Hardware for Helically-Applied Fiber Optic Cable Systems (WRAP Cable)	2011	Published 2020	Published in 2020
3	PAR Approval May 2019Exp. Dec. 2023	IEEE 1591.4- DRAFT	Standard for Testing and Performance of Hardware for Optical Fiber Composite Overhead Phase Conductor (OPPC)			Standard under development
	NA	IEEE 1591.2- 2017	IEEE Standard for Testing and Performance of Hardware for All-Dielectric Self-Supporting (ADSS) Fiber Optic Cable	2018	No new Activity	May be revised as part of 1591.x task force work.
	Published Date: Apr. 2017	IEEE 524- 2016	IEEE Guide for the Installation of Overhead Transmission Line Conductors		For comment only	Liaison Report
	NA	IEEE 524- 2016	IEEE PSCCC-F0 recommendation for sheave sizing		Information to be provided for inclusion in IEEE 524.	Manufacturer/end-user agreement sought in PSCCC-F0.To be provided in Q1 2022.

PRIORITY	DUE DATE	STANDARD NUMBER	STANDARD TITLE	LAST PUBLISH ED DATE	ACTION (DEV / REVISION / COMMENTS ONLY	COMMENTS
	NA	IEEE 525- 2016	IEEE Guide for the Design and Installation of Cable Systems in Substations		For comment only	Liaison Report Table Q updated Comment resolution pending

* *

Participants, Patents, and Duty to Inform

All participants in this meeting have certain obligations under the IEEE-SA Patent Policy.

- Participants [Note: Quoted text excerpted from IEEE-SA Standards Board Bylaws subclause 6.2]: o "Shall inform the IEEE (or cause the IEEE to be informed)" of the identity of each "holder of any potential Essential Patent Claims of which they are personally aware" if the claims are owned or controlled by the participant or the entity the participant is from, employed by, or otherwise represents
- o "Should inform the IEEE (or cause the IEEE to be informed)" of the identity of "any other holders of potential Essential Patent Claims" (that is, third parties that are not affiliated with the participant, with the participant's employer, or with anyone else that the participant is from or otherwise represents)
- The above does not apply if the patent claim is already the subject of an Accepted Letter of Assurance that applies to the proposed standard(s) under consideration by this group
- Early identification of holders of potential Essential Patent Claims is strongly encouraged
- No duty to perform a patent search

Patent Related Links

All participants should be familiar with their obligations under the IEEE-SA Policies & Procedures for standards development. Patent Policy is stated in these sources:

- IEEE-SA Standards Boards Bylaws (Clause 6) http://standards.ieee.org/develop/policies/bylaws/sect6-7.html
- IEEE-SA Standards Board Operations Manual (Clause 6.3) http://standards.ieee.org/develop/policies/opman/sect6.html
- Material about the patent policy is available at http://standards.ieee.org/about/sasb/patcom/materials.html

If you have questions, contact the IEEE-SA Standards Board Patent Committee Administrator at patcom@ieee.org or visit" http://standards.ieee.org/about/sasb/patcom/index.html

This patent information (slide set) is available at: https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.ppt

Call for Potentially Essential Patents

If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance (LOA): • Either speak up now, or

Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible, or Cause an LOA to be submitted

Don't discuss the interpretation, validity, or essentiality of patents/patent claims.

Don't discuss specific license rates, terms, or conditions. • Relative costs, including licensing costs of essential patent claims, of different technical approaches may be discussed in standards development meetings. • Technical considerations remain primary focus

Don't discuss or engage in the fixing of product prices, allocation of customers, or division of sales markets.

Don't discuss the status or substance of ongoing or threatened litigation.

Don't be silent if inappropriate topics are discussed ... do formally object.

Other Guidelines for IEEE Meetings

All IEEE-SA standards meetings shall be conducted in compliance with all applicable laws, including antitrust and competition laws.

See *IEEE-SA Standards Board Operations Manual*, clause 5.3.10 and "Promoting Competition and Innovation: What You Need to Know about the IEEE Standards Association's Antitrust and Competition Policy" for more details.