Meeting Minutes, 15 October 2020

IEEE Power Electronics Society Administrative Committee Meeting Agenda link



	Name	Title	Virtual
1	Frede Blaabjerg	President	x
	Liuchen Chang	President Elect	Х
2	Liuchen Chang	VP Conferences	Χ
3	Brad Lehman	VP Products	Χ
4	Yan-Fei Liu	VP Technical Operations	Χ
5	Jinjun Liu	VP Membership	Χ
6	Mario Pacas	VP Global Relations	Χ
7	Johan Enslin	VP Standards	Χ
8	Alan Mantooth	Immediate Past President	Χ
9	Braham Ferriera	Senior Past President	Χ
10	Jian Sun	Treasurer	Χ
11	Patrick Wheeler	Constitution & Bylaws Chair	Χ
		TC Chairs	
12	Rolando Burgos	TC 1: Technical Committee Chair Power & Control Core Technologies	Χ
13		TC 2: Technical Committee Chair Power Conversion Systems and	
14	Hanh-Phuc Le	Components	Х
15	Antonio Cardoso	TC 3: Technical Committee Chair Motor Drives and Actuators	X
16	Alireza Khaligh	TC4: Technical Committee Chair Vehicle and Transportation Systems	X
17	Sudip Mazumder	TC 5: Sustainable Energy Systems TC 6: Technical Committee Chair High Performance and Emerging	Х
17	Jin Wang	Technologies	Х
18	Brian Zahnstcher	TC 7: Technical Committee Chair Communications Energy Systems	X
		Members at Large 2018-2019-2020	
19	Marco Rivera	Member-at-Large	х
20	Johan Enslin (dup)	Member-at-Large	Χ
21	Helen Li	Member-at-Large	
22	Pradeep Shenoy	Member-at-Large	X
23	Brad Lehman (dup)	Member-at-Large	X
24	Noriko Kawakami	Member-at-Large	X
		Members at Large 2019-2020-2021	
25	Vladimir Blasko	Member-at-Large	
26	Antonio Cardoso	Member-at-Large	Χ
27	Udaya K. Madawala	Member-at-Large	x
28	Axel Mertens	Member-at-Large	Χ
29	Maryam Saeedifard	Member-at-Large	Х
30	Shinzo Tamai	Member-at-Large	Χ
		Members at Large 2020-2021-2022	
31	Christina DiMarino	Member-at-Large	Х
32	Marco Liserre	Member-at-Large	X
33	Sudip K. Mazumder	Member-at-Large	X
34	Brendan McGrath	Member-at-Large	X
35	Xiongfei Wang	Member-at-Large	X
36	Mark Dehong Xu	Member-at-Large	X
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	Ex Officio Members of the AdCom (Non-V	oting Members)	
Andreas Lindernann	Awards Chair		Х
Ger Hurley	History Chair		Χ
John Shen	Distinguished Lecture Chair		Χ
Harish Krishnamoorthy	Young Professionals Chair		Χ
Nayara de Freitas	Student Membership Chair		X
Katherine Kim	WIE Chair		X
Don Tan	Past President		X
Rik deDonker	Past President		Χ
John Kassakian	Past President		Χ
Phil Krein	Past President		Х
	<u>Staff</u>		
Mike Kelly	Society Executive Director		Χ
Becky Boresen	Technical Community Program Specialist		Χ
Megan Cichoki	Technical Community Program Specialist		Χ
Jane Celusak	Project Manager		Χ
Alicia Tomaziewski	TEC Project Manager		Χ
Lindsey Sorensen	Publications Administrator		Х
	Guests in attendance		
Stephanie Butler	Po-Tai Cheng	Grahame Holmes	
Issa Batarseh	Henry Chung	Chaobo Dai	
Renan Barcelos	Ralph Kennel	Udaya Madawala	
Fang Lou	Luiz Barreto	Robert Balog	
Cian Ó Mathúna	Ernie Parker	Francisco Azcondo	
Sanjib Panda	Fred Wang	Yaow- Ming Chen	

Quorum Met

Approval of Agenda

Kalyan Sen

MOTION: to approve the Agenda: Yan-Fei Liu

Second: Alan Mantooth **MOTION: Carried**

Approval of AdCom Minutes

MOTION: to approve the minutes: Jian Sun

Second: Jinjun Liu
MOTION: Carried

Approval of Action Itesm

MOTION: to approve the action itesm: Sudip Mazmunder

Second: Mario Pacas **MOTION:** Carried

Review of Remaining Action Items

Frede Blaabjerg

• https://app.smartsheet.com/b/publish?EQBCT=da9ab7b6cb7644f2ba8ed8bc8ba60511

President's Report Liuchen Chang

Huai Wang

Review of Adcom Members PELS Today

- Membership is recovering
 - o very active WIE, YP and Students community, growing chapters
- Strong publication portfolio: quality, performance and growth
 - o flourishing digital products
 - o OP-PEL far exceeded the year-1 goals
- Energetic and committed technical committees
 - o 12 TCs in operation, offering diverse tech. areas as home for each PELS member
- Conferences are recovering
 - o increased services to conference organizers
- Enhanced partnerships with national/international associations
 - o fostering activities in the strategic geographic regions
- Active standards and roadmap activities
 - o industry engagement and services
- EBL 2.0 (2021-2022) is coming......
- Strong financial position

Challenges ahead

- Grow Membership?
- How to provide enhanced benefits and services to our members?
 - o technical contents, products, conference organization, career development, networking etc.
- How to engage our members in our 12 TCs?
 - o each TC shall have a "primary event"
- How to increase partnerships and activities in targeted geographic regions?
- How to assist conference organizations in the more complex environment?
 - o Recovery of the conference contents from 2020/2021 due to travel restrictions (virtual)
- How to engage with industry and improve industry programs?
- We will continue with PELS Day, and the PELS Town Hall any other new ideas?

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Treasurer's Report

Alireza

- Despite Covid, PELS budget is doing well
- 2021- Requested 324K (3%) approved 154K
- a bit more than 50% of initiatives have been approved, unapproved projects can be funded by the 50% rule
- There is a healthy amount of funds in reserves
- Investments have been doing well
- Discussion Feb 2021 Summary final numbers are not yet available
- The 2022 budget will be rolled out in Next Gen and Next Gen will also incorporate CB accounts

Constitution and Bylaws

Katherine Kim

Reviewed process for changes to Bylaws

 Presented – Name change for TC4 (Electrical to be changed to Electrified – unanimously approved by TC4 and by Tech Ops.

Proposed Motion: Change TC name from Electrical Transportation Systems to Electrified Transportation Systems

• Presented – Add Term Limits on Treasurer – All positions have term limits except the Treasurer position. Proposed Motion: Change maximum number of terms for Treasurer from "no limit" to "3" – there would be a 2 year gap before eligible for re-appointment.

Discussion by Adcom: Was there a reason there was no limit – Don Tan – reviewed history. Now we have more members and there will be more automation making it easier to delve into the finance details. Comment that it not be made a formal term limit. Comment that we now have a full time ED in PELS so that it is possible to not need a long length of continuity. All other comments can be through email.

Presented New Title and Description for VP Standards – In order to align with the Strategic Plan

This would change the VP Standards to oversee Industry. This position has three names being considered e.g. VP Standards and Industry or Industry Relations or Industry Engagement.

Proposed motion: the VP for (new name) chairs the (new name) committee and ensures alignment with IEEE PELS strategy.

Discussion: Pradeep Shenoy supports this. There is support for the third name. Are these two different roles being combined? It is to get a formal collaboration between standards and industry. Comments going through email or chat.

Proposed Considering changes to PELS Bylaws: Vice Presidents Nominations

Proposed: The nominations for the Vice Presidents shall be from voting AdCom members from current and previous two years.

This will allow all the previous TC chairs to be included (as TC chairs will be rotating voting members) Discussion: Will be able to provide inputs to Katherine after meeting.

Nominations Report

Frede Blaabjerg

Upcoming elections

- President-Elect
- VP of Membership
- VP of Global Relations
- VP of Standards
- Members at Large 2022-2024

Review of Committee and timeline

Motion from NomCom: to approve 3 new NomCom members to serve a 3 year term (2021-2023)

Ernie Parker, Zhengming Zhao, Hui Li

Strategic Planning Committee

Alan Mantooth

- Review of Strategic Plan
- The tie into FEPPCON proposed for after ECCE in BC, Canada
- FEPPCON Topic review
- Expected Outputs from FEPPCON
- Discussion Guidance—Initiatives; Activities; Does Adcom need to meet quarterly to discuss various topics that relate to this forum.

Discussion: Students to be TC members (encourage), Energy efficiency day – raise some visibility in areas where we are relevant but are bigger than us; Strengthen cooperation with EPE, PhD schools

Having a premier PE Event for industry. Create industry focused award, recognize designs, engineering projects, and products.

Email Alan additional ideas

Outside of the Agenda announcement:

Notification of Bram Undifferentiated Pleomorphic Sarcoma (UPS)

Send well wishes through Alan

Walter Chalupa – passed away – commercial sales PELS magazine

VP for Membership

Jinjun Liu

Statistics

- Last 5 yrs PELS has had membership increase reached 10,825 in 2019
- Decline in 2020- about 10%
- +11% from Feb-March 2021

5 year goal

- Keep on implementing current effective practices and following fundamental principles
- Fine tune the details of structure, procedure and internal mechanism
- Focused on 2 or 3 new initiatives of significant benefits to PELS members
- Ensure a sustainable membership growth of around 5% every year

Continue

- Regional DL program
- PhD School program
- More benefits for PELS members in paper publication/review
- Setting up mechanism to track the status of student chapters and update their contact information
- Filling and replacing some positions in the Committee
- Establishing guidelines for the new PELS Best Chapter Awards
- Help with recovering of the membership number, declined due to COVID-19
- Support PELS Day YP's involved

Coming from: Membership Committee

Motion: Approve an amount of \$25K to PELS 2022 budget for the ongoing project of PhD Schools

Coming from: Membership Committee

Motion: Approve an amount of \$24K to PELS 2022 budget for the ongoing project of Mentorship and Career Development

Coming from: Membership Committee

Motion: Approve an amount of \$20K to PELS 2022 budget for the ongoing project of Diversity and Inclusion

Coming from: Membership Committee

Motion: Approve an amount of \$30K to PELS 2022 budget for the ongoing project of Society Growth, Branding, and

Recognition

MOTION APPROVED

VP of Technical Operations

Pat Wheeler

Priority for 2021/22 is the consolidation of the new Technical Committee (TC) structure and operation

- No significant changes are planned to the Technical Committee structure or scope
- Ensure that all TCs have a 'flagship' conference or workshop appropriate for their technical area and with significant PELS involvement the 'term' flagship will also be defined in this context!
- Policy on the allocation of Student travel/engagement grants to be on the support of new/growing conferences with a focus on inclusivity and diversity
- Alicia has generated a Dashboard for all the Technical Committees so that we can track all the information
- Validation of the TC scope planned for the next FEPPCOM in line with the PELS Strategy

TC membership has begun – please join and encourage others

Coming from: Technical Operations Committee

Motion: to approve the revised P&P documents for the following Technical Committees TC5 and TC7

Motion: to approve the new P&P documents for the following Technical Committees

- TC8, TC9, TC10, TC11, TC12

Motion: TC4 - name change from Electrical Transportation Systems to Electrified Transportation Systems

To be progressed as part of the next PELS ByLaws change process. New name will be used operationally from March 2021 Motion: to approve to \$156,600 to support the 12 PELS Technical Committees in 2022

Motion: to approve to \$40,000 from the IEEE Power Electronics Society to support the 2021/2022 International Future Energy Challenge Updates (IFEC)

Motion: to approve to \$86,000 to support the Student Engagement Grants from PELS TC sponsored conferences.

Motion Approved

VP Products Report

Brad Lehman

Excellent – journals and magazines

• IF, \$(1.5M net revenue-2020), downloads, quality, fast publication OJPEL success; New Digital/video abstracts in TPEL,

- IEEE TPEL is the most downloaded IEEE Transactions
- New Magazine Website https://pelsmagazine.ieee.org/
- JESTPE review time now among fastest of IEEE
- Excellent transition to new EiC for IEEE TTE
- OJ-PEL published 43 papers in 2020 and made revenue
- JESTPE and TPEL expanded Co-EiCs to keep up with growth

Digital offerings/webinars/conferences are doing well and expanding. Many 2020 new initiatives:

- Expanding short video tutorials (K. Kim), full on-line courses (M. Liserre), Reviews of existing videos (P. Enjeti / A. Banerjee), ~35 volunteers already;
- Great member benefit;
- New Products NEWSLETTER:

What Negative Impact of Covid -19?

- Delays in initiatives to expand i) social media ii) web presence but restarting now;
- Impact factors will drop due to conferences (and papers) canceled in 2020;
- Overall submission to journals seems unaffected by Covid in 2020;

Other Future Risks or Struggles

- Lindsay Sorenson leaving end of April. Need replacement;
- Backlog JESTPE grown to more than a year: <u>Motions to increase page counts</u>;
- 2021 Magazine advertising revenue may drop due to Covid;
- Rules within IEEE to let volunteers help with websites, video software purchases have slowed pels-Tube. No
 infrastructure to support submitting/reviewing/rating videos;
- IEEE always may change reimbursement formula for each downloaded paper.

Priority Action Items

- Maintain publication excellence;
- Reduce JESTPE backlog;
- Major expansion on web pages, social media, pels-Tube, digital portfolio

Possible new projects

- Linking overlength page charges to PELS membership;
- Make it easier for industrial papers to be published (different review forms, papers on patents, etc;

Motion: Reappoint Yaow-Ming Chen as Editor in Chief of the IEEE Transactions on Power Electronics for a second term from 2022-2024. (ii) Reappoint Yunwei (Ryan) Li as Editor-in-Chief of Letters for a second term from 2022-2024.

Motion: 2021 additional funds for (i) \$52.6k for JESTPE for 2500 more pages and (ii) \$10k for Digital Products to purchase IEEE PELS podcast equipment

Motion: 2022 Budgets for journals and Digital Products (see table for summary - \$1093.9k)

MOTION PASSES

VP for Global Relations

Mario Pacas

2021 plans

- Proactive participation in the PSMA committee also in CPSS
- Continue negotiations with ECPE, EPE and PCIM
- Intensify cooperation with PES, IES and IAS
- Approaching more countries / Regions by a small group of volunteers
- Supporting the PhD School program
- Recommendation for TCS for conferences not allocated to a specific TC

PSMA - Initiative of Brian Zahnstecher: set up of a Collaboration Committee, meeting will take place regularly ECPE (Strategically important for Europe) -Interest on both sides for a collaboration

PCIM - PELS will become TCS of PCIM 2022, more presence of PELS in PCIM Europe is aimed

IES - Meeting with President Elect and with the VP for Membership

PES - Xiongfei Wang is the successor of Johan Enslin as a Liaison to PES

• Joint Chapters with PES: discussion between the presidents is necessary

Systems Council -Marketing opportunities – PELS video clip requested to share with their memnbers

Smart Grid -Antonello Monti as new Liaison appointed

• He is now organizing a Forum within the Smart Grid initiative

International

- Many activities frozen due to the travel restrictions
- Turkey is looking for collaboration
- Participation of PELS in Region 9 Virtual Meeting

IoT InitiativeO Henry Chung is member of the board

Small committee for "homeless" conferences and events.

- Events that are applying for sponsorship but cannot be assigned to a single TC
- Sub-Committee will take care and report to the VP of conferences

Motion from committee: by 10 kUS\$ to a total of 25 kUS\$ in order to support up to 5 PhD Schools **MOTION PASSES**

VP of Standards & Update on Roadmaps

Johan Enslin

ITRW 2.0 was launched in 2020

Podcast posted; Live Webinars; Special Issue for the Open Journal of Power Electronics; New Working Groups;
 Collaboration with IEEE Roadmap User Group (IRUG) and HIR (Heterogenous Integration Roadmap)

ITRD got active in 2020

 Over 85 members; White Papers; Opportunities for new standards; Working Groups established; Monthly virtual meetings.

Others

- Cyber Physical Systems
- Energy Access
- EV charging infrastructure

Action Plan for more industry content (Strategic Plan)

- Integrate, Projects, Industry, Initiatives and Standards
- New integrated portfolio name: Options (Motion at AdCom?)
 - Standards and Industry
 - Standards and Industry Engagements
- Reps from all TCs on PELSC
- Have home for Industry Network (IAB)
- Have an integrated PELSC portfolio with Co-Chairs:
 - o Standards
 - o Programs (Roadmaps and Initiatives)
 - o Industry Network (IAB)
- Special Industry Products
 - Special Issues in IEEE Open Access Journal
 - o Engage more with PELS Electronic Magazine
 - Special Sessions in PELS Conferences
 - o Distinguished Industry Lecturer (DIL) Program rollout

Motion: to approve \$30,000 to support the PELS Standards Committee Activities for 2022

VP Conferences Report

Liuchen Chang

Covid-19

- Total Number of Planned Conferences didn't Change in 2020, few were Cancelled/Postponed
 - SLED, PwrSoC, ESAR-ITEC, SPEC
- Net Loss of Some Major Conferences
 - Penalties due to Contract Cancellation; Lost Exhibition Income
- Smaller Conferences were Less Affected
- 2021 Conferences Continue to be Impacted by COVID-19
 - Major Conferences Preparing to Brace for Possible Net Loss
 - Almost All Conferences Before November have Decided or are Preparing to be Virtual
- Reduced Number of Papers could Affect Download Income in Future Years
- Conference Structure and Approval Process
 - Society-Level Conferences: Steering/Coordination Committee ⇒ Conference Committee
 - TC Conferences: TC ⇒ Conference Committee
 - Other Conferences: Mini-Committee Including VP Global Relations
- Supporting Conference Organizers
 - Sharing Best Practices and Experiences (5.4)
 - Conference Organizer Symposia (1/14/2021, 2/25/2021, ...)
 - Develop/Enhance Online Tools & Resources (5.1, 5.2)
 - 2021 Initiative Funds

VIP Best Paper

- Value to Industry & Practitioners (VIP)
- Support Strategic Plan 2.3
 - Encourage Application-Driven Contents
 - Attract and Grow Industry Participation
- Annual Selection from Papers Presented at PELS Conferences of the Year
- Criteria, Process, Financials & Industry Sponsorship
- Form an ad hoc Committee, Present a Detailed Plan at Fall Meeting, Start Implementation in 2022

Motion: Advance \$10K to support SPEC 2021

Motion: Provide \$2,000 to ECCE-Asia Coordination Committee for a logo competition

Motion Approved

Awards Andreas Lindemann

Overview of Awards – IEEE level, PELS Awards, and publication awards

Review of revisions released by TAB

New awards released by TAB:

- IEEE Transactions on Transportation Electrification Prize Paper Award
- IEEE PELS Technical Achievement Award for Integration and Miniaturization of Switching Power Converters

New award under preparation

- IEEE PELS Outstanding Achievement Award on Aerospace Power TC11
- plaque+1500USD+max. 1000USD travel support

Discussion

- revision of TC7 awards
- concentrate awareness by limiting the number of awards, especially with few prospective winners?

Milestone Program/ PELS/History Chair Gerard Hurley

Milestone Update – Power MOSFET – hard to identify an Eureka Moment

 $\label{lem:mercury} \textbf{Arc Rectifier-good candidate-but need to identify an exact location of the invention}$

History Webinars

Nicola Tesla – by W. Bernard Carlson – 275 attendees
Thinking about doing the history of the MOSFET
Bell Labs – working with Bill Peterson to develop a webinar about Bell Labs and Power Electronics in the 70s.

<u>Financial implication of this AdCom</u>
Alireza K

We have the resources to support the budget implications of this meeting and passed motions.

Open Q&A – no questions

<u>Adjourn</u>

MOTION from To Adjourn **Jinjun Alan**

MOTION: Carried

