

September 27, 2018

	Name	Title	Present Thursday	Present Friday	Absent
1	Alan Mantooh	President	x	x	
duplicate	Frede Blaabjerg	President Elect			
2	Liuchen Chang	VP Conferences	x	X	
3	Frede Blaabjerg	VP Products	x	X	
4	Yan-Fei Liu	VP Technical Operations	x	X	
5	Jinjun Liu	Exec VP Membership	x	X	
6	Mario Pacas	Exec VP Global Relations	x	X	
7	Peter Wilson	Exec VP Standards	x	X	
8	Braham Ferriera	Immediate Past President	x	X	
9	Don Tan	Senior Past President	x	X	
10	Jian Sun	Treasurer	x	X	
11	Patrick Wheeler	Constitution & Bylaws Chair	x	X	
		<u>TC Chairs</u>			
12		TC 1: Technical Committee Chair Power & Control Core Technologies	x	X	
13	Rolando Burgos	TC 2: Technical Committee Chair Power Conversion Systems and Components	x	X	
14	Uday Desphande	TC 3: Technical Committee Chair Motor Drives and Actuators			x
15	Alireza Khaligh	TC4: Technical Committee Chair Vehicle and Transportation Systems	x		
16	Sudip Mazumder	TC 5: Sustainable Energy Systems			x
17	Yaow Ming Chen	TC 6: Technical Committee Chair High Performance and Emerging Technologies	x		
18	Keiichi Hirose	TC 7: Technical Committee Chair Communications Energy Systems			x
		<u>Members at Large 2017-2018-2019</u>			
Duplicate	Liuchen Chang	Member-at-Large	duplicate		
20	William Gerard Hurley	Member-at-Large	x	X	
21	Katherine Kim	Member-at-Large			x
22	Ernie Parker	Member-at-Large	x	X	
23	Grant Pitel	Member-at-Large	x	X	
24	Seung Ki-Sul	Member-at-Large	x	X	
		<u>Members at Large 2016-2017-2018</u>			
25	Sibylle Dieckerhoff	Member-at-Large	x	X	
26	Dan Kinzer	Member-at-Large	x	X	
27	Marco Liserre	Member-at-Large		X	X Thursday
28	Annette Mütze	Member-at-Large	x	X	
29	João O.P. Pinto	Member-at-Large			x

30	Mark Dehong Xu	Member-at-Large	x	X	
		<u>Members at Large 2018-2019-2020</u>			
31		Member-at-Large			
	Marco Rivera				x
32		Member-at-Large		X	
	Johan Enslin		x		
33		Member-at-Large		X	
	Helen Li		x		
34		Member-at-Large		X	
	Pradeep Shenoy		x		
35		Member-at-Large		X	
	Brad Lehman		x		
36		Member-at-Large			
	Noriko Kawakami		x		
		<u>Non-Voting</u>			
	Andreas Lindemann	Awards Chair	x		
		<u>Staff</u>			
	Mike Kelly	Society Executive Director	x	X	
	Donna Florek	Technical Community Program Specialist	x	X	
	Becky Boresen	Technical Community Program Specialist	x	X	
	Jane Celusak	Project Manager	x	X	
	Alicia Tomaziewski	TEC Project Manager	x	X	
		<u>Guests</u>			
	Phil Krein	Past President	x	X	
	Hiro Akagi	Past President	x	X	
	Dean Paterson	Past President	x	X	
	Grahame Holmes		x		
	Yongsug Suh		x		
	Christina Di Marino	Student Chair	x		
	Antonio JM Cardoso	Region 9 (also representing TC 3)	x	X	
	Robert Balog	Mentoring Chair	x	X	

Motions From this Meeting:

Motion to approve the Agenda: Liuchen

Second: Pradeep

Motion Carried

Motion to approve the minutes from APEC 2018: Don Tan

Second: Pradeep Shenoy

Motion Carried

1.1 Motion to the ECCE Steering Committee that PELS asks for parity in all advertisement, signage and branding in all future ECCE North America Communications – Braham Ferreira

Second Ernie Parker

Motion Carried

Action: President- to inform ECCE Steering Committee to provide equal signage for PELS

1.2 Motion from Awards Committee

To approve as one of the current sponsors that IEEE Transportation Electrification Community may become an additional sponsor of the IEEE Transportation Technologies Award

Motion Carried

Action: PELS Staff to communicate the permission for TEC to become an additional sponsor for the IEEE Transportation Technologies Award

Motion from Awards Committee

To Approve the IEEE Power Electronics Emerging Technology Award

Motion Carried

Action: Donna Florek and Andreas Lindemann: Submit to TAB ARC for Approval in November

Action: PELS Staff - After Approval of the IEEE Power Electronics Emerging Technology Award: create one consolidated location on website for awards staff to implement

Motion: to approve the Bylaws and waive the right to another 30 day review

Motion Carried

Action: Donna Florek to post Bylaws on PELS Website for 30 days. After that point the Bylaws will become final

Motion: That AdCom adopts the revised Bylaws as given in the attached file: Constitution & Bylaws Committee

Motion Carried

Motion to authorize an additional 50K from 2018 (and balance in 2019) to cover the cost of China and India in the Empower a Billion Lives Competition – Deepak Divan

Second Liuchen Chang

Motion Carried

Motion to adjourn Mario Pacas

Second Jinjun Liu

Day 2

Commenced

Motion to approve the consent agenda: Don Tan

Second Liuchen Chang

Motion Carried

Motion from Products Committee

Coming from: Products – Publications (JESTPE-2018)

Motion: Page budget of from 1900 pages to 2340 for JESTPE for 2018

Made by: Don Tan, Second by Brad Lehman

Motion carried

Action: PELS Staff to communicate to change the page budget on forecast for the current year

Motion to approve the Editorial Board TPEL 2019 to 2021

Motion Carried

Action: Notify individuals of their appointments and publish information.

Editor in Chief : Yaow-Ming Chen, National Taiwan University, Taiwan

Editor at Large : Sudip Mazumder, University of Illinois, USA

Editors:

- Hui (Helen) Li, Florida State University, USA
- Chun Taek Rim, Gwangju Institute of Science and Technology, South Korea
- Paolo Matavelli, University of Padova, Italy

Editor in Chief for IEEE Power Electronics Letters: Yunwei (Ryan) Li, University of Alberta, Canada

Motion to approve the Products Policies and Procedures (Merging the Digital Media and Educational Committees)

Motion Carried

Action: Notify Committee Chairs that this has now been changed

Motion to approve the Policy and Procedure Manual for Fellows Committee.

Motion Carried

Action: Post new Fellows Policy and Procedures Manual on PELS Website

Action from LRP:

Ad Hoc committee

Review and revise the TCs.

Create a process to form, rejuvenate or sunset them within the current TC Structure

Don, Braham, Brad, Robert P, Yan-Fei Liu

Motion to approve SPEC 2019 Budget and see loan of \$10K

Motion Carried

Motion from Conferences Committee to approve the INTELEC venue, budget and seed money of up to 50K

Motion Carried

Motions from Conferences Committee

Approve additional Loan request of \$20K to cover the upfront expenses for ECCE 2019 (for a total of \$50K)

Motion to approve the budget and loan for ECCE 2020

Motion to Adjourn Don Tan

Second Ernie Parker

Motion Carried Meeting ended 10:47 am PSD

Quorum Met

Approval of Agenda

Motion to approve the Agenda: Liuchen

Second: Pradeep

Motion Carried

Approval of AdCom Minutes APEC 2018 San Antonio Texas

Motion to approve the minutes: Don Tan

Second: Pradeep Shenoy

Motion Carried

Presidents Report – Alan Mantooth

TAB News

- PRAC Reviews (June '18)

- TAB VP election
- Contracting Ad Hoc - \$25k limit increased

Cybersecurity Ad Hoc Progress

- Meeting monthly
- Having in special section in JESTPE (2019)
- Participating in eGrid 2018
- Co-sponsoring a cybersecurity conference with ORNL (April 30-May 2, 2019)
- Joint webinars with TEC on transportation cybersecurity
- Investigating additions to IEEE 1547, reference guides and designs for cyber hardening of power electronics

Design Automation in Power Electronics (DAPE)

- Miroslav Vasic, Universidad Politécnica de Madrid
- Yarui Peng, University of Arkansas
- Peter Wilson, University of Bath
- Donna Florek, IEEE PELS Staff
- Thanks to Abby Bailey (Smith-Bucklin) and Dina O'Rourke (IEEE) for logistical assistance
- Special thanks to our speakers!

Restructuring

- eGrid investigating the possibility of becoming a TC
- Empower a Billion Lives Group (EBL Group)
 - Cross-cutting the Society
 - Reports to President
- Executive Vice-Presidents becoming elected officers -> Vice-Presidents
- New Initiatives and Best Practices

Upcoming Activities & Discussions

PELS vice Presidential Elections

ECCE – IAS Annual Meeting co-location

Executive Session

Executive Session ending 3:11 pm

Motion to the ECCE Steering Committee that PELS asks for parity in all advertisement, signage and branding in all future ECCE North America Communications – Braham Ferreira

Second Ernie Parker

Motion Carried

Awards Report- Andreas Lindemann

Current Awards

- report and status

New Awards:

IEEE PELS Vehicle and Transportations Systems

IEEE Power Electronics Emerging Technology Award

See Awards Committee Report

Motion from Awards Committee

To approve as one of the current sponsors that IEEE Transportation Electrification Community may become an additional sponsor of the IEEE Transportation Technologies Award
Motion Carried

Motion from Awards Committee

To Approve the IEEE Power Electronics Emerging Technology Award
Motion Carried

Action item – create one consolidated location on website for awards staff to implement

Treasurer Report – Jian Sun

- 2017 FM 14 Summary
- 2018 Budget, Initiatives & Status
- 2019 Budget Development
- Financial Statistics and Trends

2017 FM14 Summary Report

PELS 2017 FM14 Summary Report	INCOME		EXPENSE		NET		Variance
	Budget	Actual	Budget	Actual	Budget	Actual	
INVESTMENT RETURNS	0.0	0.0	0.0	-1,253.5	0.0	1,253.5	1,253.5
PERIODICALS	2,041.7	2,360.6	1,145.3	1,044.2	896.4	1,316.4	420.0
NEWSLETTERS	0.0	4.8	0.0	0.0	0.0	4.8	4.8
NON PERIODICAL SALES	0.4	0.3	16.4	29.4	-16.0	-29.2	-13.2
MEETINGS/CONFERENCES	3,623.2	4,746.5	2,457.1	3,298.1	1,166.1	1,448.5	282.4
GRANTS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ADMINISTRATION	0.0	0.0	669.0	603.1	-669.0	-603.1	65.8
SOCIETIES PROJECTS	0.0	0.0	149.0	79.7	-149.0	-79.7	69.3
COMMITTEE/OTHER	0.0	0.0	1,078.8	1,155.7	-1,078.8	-1,155.7	-76.9
SUBTOTAL	5,665.4	7,112.2	5,515.7	4,956.7	149.7	2,155.5	2,005.7
OU RESERVE SPENDING)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	5,665.4	7,112.2	5,515.7	4,956.7	149.7	2,155.5	2,005.7

2017 Project Spending: \$79.7K

Total Operational Net Excluding Project Spending: \$981.7K

50% of Net: \$490.8K

2018 Approved Initiatives

Project	New	Carryover	Approved \$
1) Billion Smiles - Design Contest and Humanitarian Prog.	X		\$40,000
2) Member Loyalty and Grassroots Programming	X		\$20,000
3) Standards Activity & Cooperative Programming	X		\$30,000
4) Cyber Security in Power Electronics and Systems	X		\$22,000
5) Education - (from LRP) MOOC Offerings	X		\$0
6) Mentorship and Future Workforce Fund	X		\$5,000
			\$117,000

2019 Initiatives

- First-Pass Budget due on July 5
- Discussion at LRP July 6-8
- Submitted in Late July

Mentorship and Career Development	\$20,000	Ongoing Since 2017
Member Loyalty, Acquisition, and Grassroots Programming	\$20,000	Ongoing Since 2017
Cybersecurity: Controls and Communications	\$20,000	Ongoing Since 2017
IEEE Roadmapping Activity, Development, and Support	\$20,000	Ongoing Since 2017
PELS Scholarship and Future Workforce Support Program	\$75,000	New Project
Conference Development and Attendee Growth Program	\$30,000	New Project
Industry Engagement for Service and Growth Program	\$30,000	New Project
Educational Products Development and Outreach	\$30,000	New Project
Total	\$245K	

Summary



- PELS Continues on a Growth Trajectory
- Products and Conferences Incomes Have Both Doubled Since 2007
 - Products Net Growth is Steady
 - Conferences Net Fluctuates Significantly
 - 2016 Almost the Same as 2007 & 2008
 - 2017 Double from 2016
- Reserve has Remained More or Less Flat Since 2013
 - Expense/Reserve Ratio Approaching 1
 - Investment Income May Help to Increase Reserve and the Ratio

Constitution & Bylaws Report – Pat Wheeler

ByLaws Change 1: *Energy Access* should be a Working Group within PELS.

Rational: a Standing or Technical Committee is not the appropriate governance structure for this worthy activity. Whilst we do need support this activity we must find a suitable mechanism in order to achieve this goal.

The IEEE would like us to use *Working Group*, NOT *Group* as PELS proposed

ByLaws Change 2: remove Executive Vice Presidents and replace with three additional Vice Presidents

- Vice Presidents to be elected at a rate of three per year
 - Staggered elections give better continuity in the PELS Leadership Team
 - Avoids having too many people on the Nomination Slate each year
- Vice Presidents' term to be two years
- Maximum service of two terms (ie one re-election)

- Remove President-Elect from the list of voting members of AdCom
 - Prevents there being more than 50% non-elected voting members of AdCom
 - IEEE states that the majority of voting members of the AdCom should be elected



ByLaws Change 3: Standing Committees

- Delete Intersociety Liaison Standing Committee
 - Already operating as a sub-committee of Global relations
 - Already has the same Chair and meets as one committee
 - Add Industry Advisory Board as a Standing Committee
 - Already operating as an AdHoc Committee
 - Change name of Long Range Planning to Strategic Planning
 - Name to reflect the expected outcomes
 - Define the membership, purpose and frequency of the meetings
 - Meetings to focus on a strategic plan for next five years
- Standing Committees - Proposed**
- a. Constitution and Bylaws
 - b. Fellow Evaluations
 - c. Awards
 - d. History
 - e. **Global Relations**
 - f. Standards
 - g. Membership
 - h. Conferences
 - i. Products
 - j. Technical Operations
 - k. Nominations
 - l. **Strategic Planning**
 - m. **Industry Advisory Board**



Motion: to approve the Bylaws and waive the right to another 30 day review

Motion Carried

Motion: That AdCom adopts the revised Bylaws as given in the attached file: Constitution & Bylaws Committee

Motion Carried

History Report – Gerard Hurley

-Milestone Project

-Planning the Dedication Ceremony

SCR/Thyristor Milestone

- Milestone Plaque at Clyde NY going for approval at IEEE History Committee in October
- Bill Peterson visited the site in July
- Local Rochester Section supports the application
- Need to organize unveiling event for the plaque

Planning the dedication ceremony

- Templates are available on the ETHW to help in the planning
- Recommend contacting the IEEE President's Office early in the process to arrange and invite IEEE speakers.

30th Anniversary

- Video prepared for Town Hall Meeting
- Tie Design and pin approved for PELS 30th Anniversary reception
- Upcoming anniversary events PESC is 50 years in 2019

PELS Day 2019 will take place in June

Empower A Billion Lives – Deepak Divan

Empower a Billion Lives – Pacific Asia Regional

- PELS Pays \$7,500 towards team registrations
- PELS Pays \$10,000 towards awards
- EBL-Pacific Asia to raise a target of \$32,500 towards local expenses and awards
- The above estimates is exclusive of travel awards for team representative to attend the Global Final in Baltimore which will be paid by PELS – estimated at \$5,000 per team (6 teams)
- EBL Pacific-Asia will organize the following awards:
 - 1 Grand Award
 - 4 Best of X Award
 - 1 Best Student Team Award

Empower a Billion Lives – European Regional

- PELS Pays \$7,500 towards team registrations
- PELS Pays \$10,000 towards awards
- PELS Pays \$16,000 to subsidize Northern African Teams travel
- EBL-Europe to raise a target of \$40,000 towards local expenses and awards
- The above estimates is exclusive of travel awards for team representative to attend the Global Final in Baltimore which will be paid by PELS – estimated at \$5,000 per team (6 teams)
- EBL Europe will organize the following awards:
 - 1 Grand Award – target \$15,000
 - 4 Best of X Award – target \$7,500 each
 - 1 Best Student Team Award - \$5,000

Empower a Billion Lives South Asia Regional

- PELS Pays \$7,500 towards team and judge registrations
- PELS Pays \$25,000 towards awards
- EBL-South Asia to raise a target of \$25,000 towards local expenses and awards
- The above estimates is exclusive of travel awards for team representative to attend the Global Final in Baltimore which will be paid by PELS – estimated at \$5,000 per team (6 teams)
- EBL South-Asia will organize the following awards:
 - 1 Grand Award – target \$15,000
 - 4 Best of X Award – target \$7,500 each
 - 1 Best Student Team Award - \$5,000

Empower a Billion lives Africa Regional

- PELS Pays \$7,500 towards team and judge registrations
- PELS Pays \$25,000 towards awards
- EBL-Africa to raise a target of \$25,000 towards local expenses and awards
- The above estimates is exclusive of travel awards for team representative to attend the Global Final in Baltimore which will be paid by PELS – estimated at \$5,000 per team (6 teams)
- EBL Africa will organize the following awards:
 - 1 Grand Award –
 - 4 Best of X Award –

- 1 Best Student Team Award -

Empower a Billion lives Americas Regionals

- PELS Pays \$7,500 towards team and judge registrations
- PELS Pays \$25,000 towards awards
- EBL-Americas to raise a target of \$25,000 towards local expenses and awards
- The above estimates is exclusive of travel awards for team representative to attend the Global Final in Baltimore which will be paid by PELS – estimated at \$2,000 per team (6 teams)
- EBL Americas will organize the following awards:
 - 1 Grand Award – target \$15,000
 - 4 Best of X Award – target \$7,500 each
 - 1 Best Student Team Award - \$5,000

Finances

Summary of Expenses 2017- 2018 (Feb. 2019)

- Revenue
 - PELS \$150,000 + \$50,000 (to be requested)
 - PES \$50,000 (under consideration)
 - TAB Management Council \$31,000
 - Foundation Fund Raising \$10,600 YTD
 - Local Committees and Industry \$40,000 (Spain) + \$25,000 (India) + \$25,000 (US) + \$40,000 (China) + \$10,000 (South Africa)
 - **TOTAL REVENUE \$431,600**
- Expenses
 - Organizing Committee \$45,000
 - Local expenses for Teams & Judges (Registrations and Team Travel Support to Regionals) \$25,500 (Spain)+\$7,500 (India)+\$7,500 (US)+ \$7,500 (China) + \$7,500 (South Africa)
 - Development Awards to Top Teams \$250,000
 - Judge Travel \$20,000
 - **TOTAL EXPENSE \$370,500**



2019

- Expenses
 - Field Trials \$50,000
 - Travel Support for Teams to Final \$132,000 (\$5,000 per team for 24 teams and \$2,000 per team for 6 teams)
 - Local Expenses for Finals \$20,000
 - Awards \$400,000 (total awards to teams is \$800,000)
 - ECCE Registration Fee for 30 Winners assuming 15 are students \$19,500
 - **→Total Expense: \$621,500**
- Revenue
 - **→Foundation and Volunteer \$800,000**
- **→NET for EBL 2 round (2020) \$178,500**



Motion to authorize an additional 50K from 2018 (and balance in 2019) to cover the cost of China and India –
 Deepak Divan
 Second Liuchen Chang
 Motion Carried

Mentorship Program Committee – Robert Balog

- Strategic Plan initiative lead by the President
- Provide career (non-technical) mentorship as a service to members
 - All phases of career
 - Various topics
- Established April 2017
- Held three conference “round tables”
 - Stating point, not the end-game

Steering Committee

Name	Representing
Alan Mantooth	Co-Chair, Academia
Robert Balog	Co-Chair, Academia
Harish Krishnamoorthy	Academia (U. Houston)
Christina DiMarino	Student (Virginia Tech)
Igor Stamenkovic	Industry (Eaton)
Grant Pitel	Industry (MagnaPower)
Zheyu Zhang	Industry (GE Global Research)
Donna Florek	PELS staff
Katherine Kim	Academia (Ulsan National Institute of Science and Technology), PEELS Women in Engineering (<i>ex officio</i>)
Somasundaram Essakiappan	Academia (UNC Charlotte), PEELS Young Professionals (<i>ex officio</i>)
Ira Pitel	Industry (MagnaPower), PEELS Industry Liaison (<i>ex officio</i>)
TBD	APEC (<i>ex officio</i>)
TBD	ECCE (<i>ex officio</i>)



Roundtable Mentoring @ ECCE 2017

- Chaired by Harish Krishnamoorthy
- Sunday evening, off site at Boi Na Braza Brazilian Steak House in semi-private room
- Free, 44 participated
- 3 x 30-minute rotating program
- Mentees selected from six topics:
 - **How to Write a Prize-winning Paper** - Brad Lehman
 - **Developing Leadership Skills** – Alan Mantooth
 - **Entrepreneurship** – Ira Pitel, Deepak Divan, Bob Guenther, Igor [Stamenkovic](#)
 - **Work/Life Balance** – Annette [Muetze/Elsholtz](#)
 - **Networking** – Brian Zahnstecher, Uday Deshpande
 - **Job Transition** – Johan [Enslin](#)



Roundtable Mentoring @ APEC 2018



- Chaired by Grant Pitel
- Monday evening, in the convention center
- \$10 Paid online registration, 57 participated
- 3 x 25 minutes (time to get food)
- Mentees selected from 4 topics:
 - **How to Write a Prize-winning Paper** – Brad Lehman and Henry Chung
 - **Developing Leadership Skills** – Frede Blaabjerg, Don Tan
 - **Entrepreneurship** – Ira Pitel, Chris Dries, Bill Peterson
 - **Networking** – Ada Cheng, Noriko Kawakami, Bob Guenther



Upcoming Events

- APEC 2019
 - Dinner format
 - Pick mentors (not topics), mentor suggest 3 topics – like the DL program
- ECCE Asia 2019
 - Back-to-back with YP
 - 1hr mentorship panel discussion + 1hr sit-down networking dinner
- ECCE 2019
 - Lunch format

Committee Work

- Expand the committee of volunteers to serve as event hosts.
- Enable the steering committee focus on strategic, not tactical
- Expand the cadre of mentors to rotate through for future events.
- Develop target marketing strategy based in industry, academic, student, YP, mid-career
- Develop the continuity of mentorship beyond single touch-point events.
 - Benchmark with other societies
 - How to continue the M&M relationship
- Develop an operations manual to incorporate learning
- Website presence for mentorship

Motion to adjourn Mario Pacas

Second Jinjun Liu

Day 2

Commenced

Motion to approve the consent agenda: Don Tan

Second Liuchen Chang

Motion Carried

Products Report – Frede Blaabjerg

PELS Products Overview

- PELS Transactions Editor: Brad Lehman
- PELS Letters Editor: Henry Shu-hung Chung
- IEEE Journal of Emerging and Selected Topics in Power Electronics: Don Tan

- IEEE Transactions of Transportation Electrification: Ali Emadi
- Newsletter and Magazine Editor: Ashok Bindra
- Digital Media Editor: Prasad Enjeti
- Webmaster: Grant Pitel
- IEEE Trans. Sustainable Energy: Martin Ordonez
- IEEE Journal on Photovoltaics: Patrick Chapman
- IEEE Trans. Smart Grid: Antonello Monti
- IEEE Electrification Magazine : Bulent Sarioglu

IEEE Transactions on Power Electronics continues to run strong:

- Impact factor is 6.812, placing it in the top five journals in impact factor in electrical engineering
- In 2017 TPEL papers were downloaded more than any other IEEE journal (+500k) except IEEE Access
- Review time is lowest of the larger IEEE Transactions (47.3 days)
- Acceptance rate is around 31 %
- We have receive +1960 new papers in 2018
- We have published in 2018 - 11000 pages (+600 papers published now).
- 12000 pages used for 2019 – Until April batched
- New EiC's in 2019 –
- Feature papers now monthly – with slides
- No papers in review more than 100 days – large effort

IEEE Transactions on Power Electronics continues to run strong: See Report

IEEE Journal of Emerging and Selected Topics in Power Electronics: See Report

IEEE Transactions on Transportation Electrification: See Report

IEEE Power Electronics Magazine: See Report

The Chinese Journal of Electrical Engineering – by China Machine Press (CJEE)

1st issue, Dec., 2015

The Transactions on Electric Machines & Systems (CES TEMS) – by China Electro-technical Society - 1st issue, March, 2017

The CPSS Transactions on Power Electronics and Applications – by China Power Supply Society (CPSS TPEA) 1st issue, Dec., 2016

Still doing well – soon need new agreement

Digital Media

Committee will be inviting Award paper authors & PELS DLs to give a webinar and feature them separately on IEEE PELS resource center

Enjeti & Becky will send out invites to authors

My PhD in 200 seconds – Ask PhD students who defended their thesis across the world less than a year to upload their 200 seconds video to PELS website. Have judges from across the world score to rank them. Give out 5 PELS Best Thesis Awards each year.

Enjeti, Yongheng Yang and Ke Ma will form a committee to work on this. Expected launch is in March 2019 with finalists to be announced in ECCE 2019

New Initiatives in 2018 from Products

Digital Media Upcoming plans:

- Launch a online conference “PELS Online Series:

- μ-Inverters ” in December 2018 (1/2 day Dec 8 Saturday)
- *Enjeti will form a list of volunteers to launch this
- Suggested list of invited presentations:
- USA: Sunpower ; Enphase etc..
- Chinese company
- Europe
- Korea
- Australia etc..
- Pay honorarium to presenters.

Summary for VP of Products:

- Excellent activities – journals and magazines – finalized for 2018
- Impact factors good – more pages – more submissions for all...
- Economic sustainable journals except TTE and IEEE Electrification magazine
- Review of all journals in 2017-2018 – Thanks to all for the efforts – very good and positive feedback – JESTPE also finally now
- Journals get very good feedback in the society
- Magazine a strong asset for the society
- EIC TPEL run out 2018 – New team to be approved
- EIC JESTPE swaps to IAS (Ojo) – steering committee in operation
- Work on more products in terms of membership benefits – digital/education – merge of educational + digital media – merge of committee
- We are active on social media + monthly newsletters
- Will be a part of a new Industrial Electronics journal – TBD November 2018
- Long Range planning in July for PELS : Open access journal proposed eg ”IEEE Power Electronics Access”

Motion from Products Committee

Coming from: Products – Publications (JESTPE-2018)

Motion: Page budget of from 1900 pages to 2340 for JESTPE for 2018

Made by: Don Tan, Second by Brad Lehman

Motion carried

Description: JESTPE is making good progress and it is now ISI indexed – additional 440 pages are requested for 2018. A per page fee is estimated at \$97/page. $440\text{pgs} * \$97/\text{pg} * 50\% \text{ PELS share} = \$21,340$.

Outcome:

Financial Implications: \$21,340 total operating budget for reimbursed/publication edit and production costs

Motion to approve the Editorial Board TPEL 2019 to 2021

Motion Carried

Editor in Chief :

- Yaow-Ming Chen, National Taiwan University, Taiwan
- **Editor at Large :**
- Sudip Mazumder, University of Illinois, USA
- **Editors:**
- Hui (Helen) Li, Florida State University, USA
- Chun Taek Rim, Gwangju Institute of Science and Technology, South Korea

- Paolo Matavelli, University of Padova, Italy
- **Editor in Chief for IEEE Power Electronics Letters**
- Yunwei (Ryan) Li, University of Alberta, Canada

Discussion: Editorial Assistant for TPEL will be moved into IEEE staff for consistency

Merge of Digital Media and Educational Committees

From the long range planning there was a recommendation to strengthen the products for the members in PELS by merging Digital Media and the Educational Committees. It should clarify better ownership of this area and should stimulate more action

Therefore the Policies and Procedures for Products is updated.

Motion to approve the Products Policies and Procedures (Merging the Digital Media and Educational Committees)

Motion Carried

Policies & Procedures – Fellows Committee – Grahame Holmes

IEEE has changed the rules so that the Chair can no longer handle the review of the nominations.

There is an increasing workload for the committee.

Therefore, it is being suggested that the Committee expand to 10 members.

Second suggestion to change the wording to nominating a Chair-Elect for the beginning of the year.

New IEEE Policy that the Fellows Committee Roster should be listed and public on the website.

Discussion: regarding the number of members on the committee and the Chair responsibilities

Final Outcome:

Motion to approve the Policy and Procedure Manual for Fellows Committee.

Motion Carried

NOTE: Adcom approved the change in Fellows committee membership numbers as per Pat Wheeler's revisions.

The discussion then considered the issue of listing the committee members on the PELS website, where we had to balance disclosure as required by IEEE verses committee sensitivity about exposing the committee members to outside pressure. Pat and I discussed briefly afterwards that this can probably be adequately managed by listing the committee later in each year, after the committee evaluations are submitted in June. This will mean the ongoing committee members will be identifiable in the following years, but incoming members get a first cycle grace period of anonymity.

VP for Technical Operations Yan-Fei Liu

TC Operation

- Technical achievement award
- All but 2, which are in process
- Technical Thrust setting up
- TC student travel grant setup
- Webinar from TCs, 9 for 2018
- Special issues for JESTPE, on going
- TC website update, by Smartsheet
- Support standard activities, standard officer
- TC meeting sign-in electronically

Current Status

- TCs have significant growth

- Activities, people, productivity
- New procedures / protocols to
- Help TC officers focusing more on decision making, solving problems
- Relieve TC officers from admin activities
- TC = Conference + Webinar + Special issues + Award + MORE
- Contribution to technologies
- FEPPCON planning

- Planned task not achieved
 - Data sharing among TCs and ourselves
 - IEEE Collabratec (no good)
 - Dropbox, Google Drive (not accessible everywhere)
 - Need to be solved

Future thoughts on Technical Operations

- TC = Conference + Webinar + Special issues + Award + more technology
- Standardizing TC officer structure
- Chair (overall)
- Vice chair (conference)
- Vice chair (technology)
- webinar, tutorial, standard
- new / future technologies, etc
- Secretary, communication / web content
- More people involved

Action from LRP:

- Ad Hoc committee
 - Review and revise the TCs.
 - Create a process to form, rejuvenate or sunset them within the current TC Structure
 - Don, Braham, Brad, Robert P, Yan-Fei Liu

Yan-Fei will be the General Chair for ECCE NA 2019 – Help Support him!

Focus on Activities

Advertise ECCE 2019 as much as possible

High Quality review of each digest

Growth on Exhibition

Looking for a new conference proceeding format

- Easier way to read it

Paper related

- Submit your excellent work!
- Topic chairs
- Reviewers

Conference related

- Proposal for special session, town hall, tutorials
- Suggestions for the exhibitors (we will follow up)
- Local arrangement
- Student travel grant application

VP Conferences Committee – Liuchen Chang

2017 – 2018 Conferences Accomplishments

- Build a resource center for PELS conference organizers. The resource center will serve as a one-stop online site for conference organizers
 - +Conferences Tracking Tool has already been implemented by PELS Staff;
 - +Collecting materials working with experienced conference organizers now for integrating into a webpage for posting on PELS website.
- Enhance the organization and operation of the PELS Conferences Committee with defined members from broad PELS constituencies, to ensure consistency and quality of conferences.
 - +Policies and Operating Procedures of the PELS Conferences Committee;
 - +Committee membership with broad representation has been formalized (+sharing best practices);
- Establish a streamlined conference application and approval process.
 - +Conference application and approval flow chart was established;
 - +Conferences Committee meetings: (1) Operation; (2) Business
 - Work with conference organizers on enhanced experience for attendees, and solid financial outcomes of PELS major conferences. Conferences shall provide PELS members a home for knowledge dissemination & exchange, networking, and career advancement.
 - +Strong PELS representations at Steering Committees of major conferences (EPE, ECCE (N.A.), INTELEC, APEC);
 - +ECCE, INTELEC, PEDG anniversary celebrations;
 - +Regular reviews and monitoring of conference progress and post conference reports and promotion responses (PELS staff, IEEE staff and VP Conferences)
 - Fostering coordination and information exchange among PELS major conferences, and among sister societies and partners.
 - +Liaison officers for ECCE (N.A.), ECCE Europe and ECCE Asia;
 - +Conducting ECCE-IAS colocation review – AdHoc Committee (Liuchen Chang, Jonathan Kimball, Sudip Mazumdar)
- Clear guidelines for conference organizers.
- Guidelines for selecting ECCE chairs (general and committees)
- No-show papers at a conference: adopting IEEE guidelines
- Responsible/appropriate conduct of conference activities: adopting IEEE code of conduct/guidelines
- Enhance engagement of TC's and members in PELS major conferences. Each TC (and the Standards Committee) may choose to have a (flagship conference as a home network. (Progressing)
 - Global conferences series (APEC, ECCE(N.A), ECCE Europe, ECCE Asia, and SPEC) – TC leadership in program committees;
 - TCs have conferences to “look after”, some have “home/flagship conferences*”:
 - TC1: COMPEL*, ICDCM
 - TC2: PwrSoC, IWIPP
 - TC3: SDEMPED*, IEMDC, PRECEDE, SLED
 - TC4: ITEC*, ITEC Asia-Pacific, ESARS-ITEC Europe, ESTS
 - TC5: PEDG*, DEAS, Ee, CPERE
 - TC6: WoW*, WiPDA, WiPDA Asia, IFEEC
 - TC7: INTELEC*, TMES

Conference Progress

- Strive to increase industry participation.
- PELS Industry Advisory Board – working together to increase industry participations in PELS major conferences –ECCE’s
- Increase industry and special sessions at PELS conferences (TCs are taking the lead, in progress)
- New PELS Financial Co-Sponsored Conferences being proposed.
- DAPE (PELS initiative)
- DEAS (EBL Initiative)
- CPERE (Egypt Chapter)
- Ee (Serbia)
- PELS Conference anniversaries
- ECCE 2018: 10th anniversary
- INTELEC 2018: 40th anniversary
- PEDG 2019: 10th anniversary
- Sharing the best practice of celebrations for subsequent anniversaries

Motions from Conferences Committee

Approve additional Loan request of \$20K to cover the upfront expenses for ECCE 2019 (for a total of \$50K)

Motion Carried

Motion to approve the budget and loan for ECCE 2020

Motion Carried

Motion to approve SPEC 2019 Budget and see loan of \$10K

Motion Carried

Motion from Conferences Committee to approve the INTELEC venue, budget and seed money of up to 50K

Motion Carried

Executive VP for Global Relations – Mario Pacas

Smart Grid

Report of Qing-Chang (Smart Grid Liaison) was presented and discussed

- Dr. Pete Wung was elected as the new Chair for IEEE Smart Grid
- IEEE Smart Grid is generating a significant amount of revenue from its Resources Center.
- Some concerns about shifting towards too much commercial were expressed.
- IEEE Smart Grid has created a Conference Committee

Systems Council

- The Council is solvent; \$350.1k surplus in 2017
- 11 current chapters (6 in NA); Israel and Singapore possible new chapters in 2018
- 12 distinguished lecturers
- Publications –IEEE Systems Journal and J-MASS (Journal on Miniaturization for Airborne & Space Systems)
- Large influx of papers to Systems Journal in 2014/5; 5,072 pages currently accepted in in backlog
- J-MASS launch date early 2019; 4 issues / year, electronic only

Activities within the last year:

- Meetings in Bogotá / Colombia resulted into a very successful Workshop with PELS members as Keynote speakers
- Meetings in Mexico -> Keynote speaker in CIEP 2018 (CIEP could become SPEC)

- Middle October meetings in Colombia (follow up) and Quito with same objectives
- Participation on the Italian PhD School
- Participation of PELS in PCIM Europe
- Meetings with ECPE and PCIM

Issues and Opportunities

- Stronger involvement in the SG community (Invitation to Peter Wung)
- Relationship to PES
- Review the participation of PELS in Initiatives and Councils
- E-VP for Global Relations should work with Mike Kelly in preparing a proposal for approaching geographical developing regions that are interesting for PELS. The objective is obtaining local supporters and the organization of Workshops in order increase the presence of PELS and to encourage the building new chapters.
- Proposal and budget to be presented in AdCom Meeting at the APEC

Executive VP for Membership – Jinjun Liu

Membership Status

- 2007-2013, 1~2%
- 2014, -0.5~-1.5%
- 2015, 3~7%
- 2016, 3~7%
- 2017, -3~6%
- Recent months in 2018
 - 5~12% YoY increasing

Updating positions on the Membership Committee

- Regional Chairs/Liaisons
- Region 1-7: Pradeep Shenoy
 - Vice Chair: Kalyan Sen (Region 1-3 and 7)
- Region 8: Vladimir Katic
 - Italy Liaison: Fabio Crescimbin
 - UK Liaison: Jun Liang
- Region 9: Joao Pinto
 - Chile Liaison/Chair: Marco Rivera
- Region 10: Sanjib Panda
 - China Liaison: Kai Sun
 - Korea Liaison: Sewan Choi
 - Japan Liaison: Toshihisa Shimizu
 - New Zealand & Australia Liaison/Chair: Udaya Madawala
- Chairs/Liaisons on specific member group/service
- Young Professional Chair: Somasundaram Essakiappan
 - Student Representative: Nayara Brandao de Freitas
- Women in Engineering: Katherine Kim
- Industry Liaison: Ira Pitel
- DL Program Chair: John Shen

Executive VP for Standards – Peter Wilson

Standards Activities

- 1573: Due for ballot by Dec 2019

- Working group being recruited and new draft being worked on
- ETTC (Electronic Transformer Technical Committee)
 - met at APEC on March 5th
 - Several standards due to expire this year
 - PARs/extensions being raised where appropriate by PELSC (a number of these fall within ETTC)

ITRW Activities

- ITRW now into its 3rd year
- ITRW Working groups met at WIPDA Asia 2018 (Xi'An) and ECCE-Asia 2018 (Niigata)
- ITRW/PELS stand at PCIM
- ITRW Steering Committee met here at ECCE 2018
- Position papers delivered by each working group (4 in total)
- These were published in the PELS Magazine June issue (which had a focus on ITRW)

ITRW Collaboration

- ITRW has collaborated with the wider initiatives in the IEEE (and with other societies)
- ITRW continues to liaise with the EPT society (packaging) – HIR (Heterogeneous Integrated Roadmap) (we, Jing Zhang, presented at their conference earlier this month)
- ITRW/PELS working with the wider IEEE road-mapping efforts (IRDS) continues.
- Bram: Governance, Peter: Technical
- ITRW/PELSC liaising with JEDEC on standards, datasheets and testing

ITRW Status

- Data collection for launch of ITRW #1 firmly underway
- Next meeting scheduled for October 31st at Atlanta (WiPDA-NA 2018)
- *Detailed agenda and scope are an appendix to these slides*
- Follow up discussions late 2018
- ITRW exec team to collate data and draft roadmap for discussion and review

Policy & Procedure update

- Revised P&P has been approved (finally!) by the Standards Association AudCom
- They were extremely strict including asking us (well insisting really) to remove all our nice layout and formatting
- 3 iterations to deal with their various issues
- Finally approved last month by the IEEE-SA AudCom
- Due for final (rubber stamp hopefully) approval by the IEEE-SA at their next meeting

Thank you to the staff for all your support.

Industry Advisory Committee Report – Pradeep Shenoy

Planning on developing an award for Industry

Long Range Planning Committee – Don Tan

Long Range Planning Committee

Roles and Responsibilities

- ▶ Long Range Planning Committee
 - FEPPCon: Every odd year, focusing on strategic technical challenges for power electronics and systems technologies in 5-10 years
 - LRPC Meeting: Every even year, focusing on strategic infrastructure and organizational effectiveness in 5-10 years
- ▶ PELS Executive Committee Meeting
 - Offsite meeting for the executive committee, focusing on the tactic issues during the duration of the incoming president
 - May occur during the tenure of the president to address important challenges facing the society



Initiatives Established by the LRP

- Create a scholarship program to support workforce development for power electronics & systems
- Establish a wireless power technology exploration group to enhance collaboration with MTT-S and other related societies/organizations, leveraging the existing WoW core volunteers, and to position PELS for future growth in this emerging areas such as IoT, RFID, 5G, CEDA, Nano Technology, Energy Harvesting, etc.
- Support the new Digital Media and Education Committee with fund to generate content such as videos on the basics in power electronics and develop an on-line depository for teaching materials, such as course notes, problems manuals and lab manuals
- Provide the Industry Advisory Committee with resources to support industry volunteers and to support PELS AdCom development for future leaders
- Initiate preliminary work for PELS to start an open access journal, for instance, Power Electronics Access
- Commission a market study to understand the potential for PELS membership growth

Strategic Actions

The committee established the following strategic actions

1. Combine the Digital Media and Education Committee (**Constitution and Bylaws Committee**)
 - Create a working group to define a structure to deliver Educational Content for 2018- 2019
 - Allocate resources for professional support
 - By year end 2018 recommendation to present case for PELS Scholarship Program
2. Form a society level Ad Hoc Committee (**President**) to review and revise the TCs. Create a process to form, rejuvenate or sunset them within the current TC Structure (**VP Operations w/ Executive Committee**)



Strategic Actions

The committee established the following strategic actions

3. President to direct the Industry Advisory Board to conduct the following (President)
 - Fundamentally understand what we aren't providing to Industry members
 - Come up with a proposal for a technology impact award
 - Industry Growth and Engagement (Initiative Name)
 - Outreach to outside IEEE Organizations such as PCIM, ECPE
 - Provide resources to support Industry volunteers
4. PELS should engage Industry Consortia focused on emerging technology trends, for example the Wireless Power Industry -> WPC Wireless Power Consortium, or the utilities -> for distributed energy generation such as roadmapping or standards, etc. (VP Operations)

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Strategic Actions

The committee established the following strategic actions

5. The President shall appoint an AdHoc Committee to conduct a feasibility study for PELS General Meeting (Or a better name than General Meeting) (President)
 - Consolidate some TC conferences into one big TC Festival plus Annual General Meeting
 - Alternatively: Co-locate our General Meeting with ECCE North America
 - OR Co-locate the General Meeting with a TC Flagship Conference (rotating among them)
6. Charge the Membership and Conference Committees to do a pilot run for 3-5 year members by creating PELS Digital Currency and develop a better understanding of our conference financial health (VP Membership/VP Conferences)

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Strategic Actions

The committee established the following strategic actions

7. Establish a Presidential appointed task force to work with staff to develop a marketing strategy through the following (President)
 - Education
 - Virtual Events
 - Networking
 - Mentoring
 - Competitions
 - Personal Branding through educational branding
 - Student Support Programming
 - Conference Industry Day
 - Job Fair for Students, Industry and Student Meet up Lunch, Industry Session, and Student Exhibition

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Strategic Actions

The committee established the following strategic actions

8. Source and Contract a marketing resource firm to conduct a society benchmarking assessment (market research) on possible total membership throughout the world. Need to determine our ideal member profile (done by a professional company) (Executive Director)
9. Develop a plan to implement PELS Day beginning in 2019 (Executive Committee)
10. Identify volunteer champions for providing Social Media content (micro volunteering opportunities) sign up on the PELS Website (The new Digital Media and Education Committee)

Motion to Adjourn Don Tan

Second Ernie Parker

Motion Carried Meeting ended 10:47 am PSD