

	<b>Name</b>	<b>Title</b>	<b>In Attendance</b>
1	Brad Lehman	President	x
2	Jian Sun	VP Conferences	x
3	Yunwei Ryan Li	VP Products	x
4	Pat Wheeler	VP Technical Operations	x
5	Mark Dehong Xu	VP Membership	x
6	Mario Pacas	VP Global Relations/Education Activities	x
7	Johan Enslin	VP Industry and Standards	x
8	Liuchen Chen	Immediate Past President	X
9	Frede Blaabjerg	Senior Past President	X
10	Alireza Khaligh	Treasurer	X
11	Katherine Kim	Constitution & Bylaws Chair	X
<b><u>TC Chairs</u></b>			
12	Luca Corradini	TC 1: Technical Committee Chair Power & Control Core Technologies	X
-	Christina DiMarino	TC 2: Technical Committee Chair Power Conversion Systems and Components	
13	Ali Bazzi	TC 3: Technical Committee Chair Motor Drives and Actuators	X
-	Mahesh Krishnamurthy	TC4: Technical Committee Chair Vehicle and Transportation Systems	X
14	Juan Balda	TC 5: Sustainable Energy Systems	X
-	Christina DiMarino	TC 6: Technical Committee Chair High Performance and Emerging Technologies	X
15	Alexis Kwasinski	TC 7: Technical Committee Chair Communications Energy Systems	Virtual
-	Marco Liserre	TC 8: Electronic Power Grid Systems	X
16	Grant Covic	TC 9: Wireless Power Transfer Systems	x
-	Kevin Hermanns	TC 10: Design Methodologies	X
17	Tao Yang	TC 11: Aerospace Power	
-	Sanjib Panda	TC 12: Energy Access and Off-Grid Systems	X
<b><u>Members at Large 2021-2022-2023</u></b>			
18	Noriko Kawakami	Member-at-Large	X
19	Yan-Fei Liu	Member-at-Large	X
(20)	Yunwei (Ryan) Li	Member-at-Large	X
21	Pedro Rodriguez	Member-at-Large	
22	Jennifer Vining	Member-at-Large	
23	Navid R. Zargari	Member-at-Large	Virtual
<b><u>Members at Large 2022-2023-2024</u></b>			
24	Stephanie Butler	Member-at-Large	X
25	Ulrike Grossner	Member-at-Large	
26	Axel Mertens	Member-at-Large	Virtual
27	Giovanna Oriti	Member-at-Large	Virtual
28	Maryam Saeedifard	Member-at-Large	X
29	Shinzo Tamai	Member-at-Large	X
<b><u>Members at Large 2023-2024-2025</u></b>			
30	Vivek Agarwal	Member-at-Large	Virtual
31	Mahshid Amirabadi	Member-at-Large	x

(32)	Christina DiMarino	Member-at-Large	
33	Philip Carne Kjær	Member-at-Large	X
34	Hong Li	Member-at-Large	X
35	Sudip K. Mazumder	Member-at-Large	X
<b><u>Ex Officio Members of the AdCom (Non-Voting Members)</u></b>			
	Andreas Lindemann	Awards Chair	X
	Ger Hurley	History Chair	X
	John Shen	Distinguished Lecture Chair	
	Nayara Brandao de Freitas	Young Professionals Chair	Virtual
	Lauren Kegley	WIE Chair	
	Yaow-Ming Chen	TPELS EiC	
	Peter Wilson	TEC Representative	X
	Don Tan	Past President	Virtual
	Alan Mantooth	Past President	x
	Phil Krein	Past President	Virtual
	Hiro Akagi	Past President	x
<b><u>Staff</u></b>			
	Mike Kelly	Society Executive Director	X
	Becky Boresen	Technical Community Program Specialist	X
	Megan Cichoki	Technical Community Program Specialist	X
	Jane Celusak	Project Manager	X
	Alicia Tomazewski	TEC Project Manager	X
	MaryBeth Schwartz	Publications Administrator	X
	Jessica Uherek	Publications Administrator	X
<b><u>Guests in attendance</u></b>			
	Jinjun Liu	Cian ÓMathúna	Antonio Cardoso
	Issa Batarseh	Brian Zahnstecher	Fei Gao
	Leon Tolbert	Luis Barreto	Robert Balog
	Al-Thaddeus Avestruz	Shimizu Toshihisa	Ashok Bindra

**Meeting called to order 1:00 PM ET – Attendance noted; Quorum Met**

#### **Approval of Agenda**

**MOTION to approve the APEC 2023 agenda: Stephanie Watts Buttler**

**Second: Juan Balda**

**MOTION: Carried**

#### **Approval of AdCom Minutes from ECCE 2022**

**MOTION to approve the ECCE 2022 minutes: Jian Sun**

**Second: Maryam Sa**

**MOTION: Carried**

#### **President's Report**

**Brad Lehman**

Acknowledgment and thank you to the outgoing officers, and PELS staff, Alicia Tomazewski

Shared self-introduction

Overview of what has happened in PELS since last AdCom- Highlights

- Strong \$\$ financial position w/reinvestment in membership and scholarships
- Growing membership, especially China; many new programs (students, WiE)
- Strong publication portfolio (quality, growth, reputation, net revenue).
- 12 active Technical Committees ~3000 members with goal 1 webinar a week

- New VP education coordinating unified education offerings
- EBL 2 ongoing at APEC
- New Milan Jovanovic Translational Research Award (motion later today)
- Industry committee expanding under VP Industry and Standards
- PELS 5 year review at TAB Nov 2022- went very well

Shared small suggestions for improvement- Diversity, embracing social media, P&P, and website

President vision for next 2 years

- PELS has 5-year LRP goals. We will work on them all, but emphasize:
- Agility for PELS to try new programs quickly, without fear to fail (includes financial planning)
- Diversity, Equity, and Inclusion (DEI) expansion
- Post-covid Conference Strategy
- Education, Outreach, and Web pages

Updates

- new PELS website/redesign
- new treasurer, Pradeep Shenoy
- IEEE Milan Jovanovic Award for Translational Research in Power Electronics – subject to Delta Foundation approval
- Next PELS AdCom Meeting- ECCE Asia, Jeju Island Korea (zoom available) Monday, May 22 (morning local time)
  - For AdCom members interested for in-person attendance, there are limited travel funds. Contact Brad Lehman or Mike Kelly to apply

### Treasurer's Report

Alireza Khaligh

PELS budget is doing well

2022 Full Year: 2.1 M

Initiative Spending: \$501K; This includes \$450K transfer to our Foundation accounts

Notes: \$14M in Reserves at the end of 2020; \$18.9M in reserves at the end of 2021; S&P 500 dropped >19% in 2022

Most likely a loss in Reserves for 2022

PELS 2023 Initiatives request \$510K

IEEE 3%/1% spending Rule limit for 2023: \$5.136M

IEEE received \$8.354M in project requests from 31 S/Cs, Approved \$6.054M (1.25%)

1.25% of (\$18.9M) = \$236K

2023, 50% spending (Full Year Fcst): \$1.05M

### VP Conferences Report

Jian Sun

Review PELS Conference Portfolio and Organization

Updates:

- eGrid and SPEC
  - New Society Initiatives Started in 2015-2016
  - Challenges due to Partnership and COVID-19
  - Strategy Meetings in Conjunction with 2022 Events
  - Agreement with PES for PELS to own eGrid 100%
  - Steering Committee P&P, New Functions & Responsibilities
- ECCE Europe: Budget Issues, 2024 and Future Plans
- INTELEC Relaunch in 2024
- Reorganization of Conference Committee
- Conference Management Tools- survey shared with past 5 year organizers seeking feedback
- Full time staff support for PELS Conferences approved, job posted

Development and plans

- Recruiting, Student Job Fair, Industry Participation and Involvement
- VIP Best Paper Awards, Industry Awards
- Industry Sessions, Tutorials, Certificate Program, PE Credits
- Focus on Diversity, Equality and Inclusion
- Policies and Procedures for Committees and Sponsorship

Motions from Committee: see consent agenda

VP for Products Ryan Li

Presented a review of PELS Products portfolio

Excellent net revenue from publications (> \$2.5M NET REVENUE, mostly TPEL)

High Impact Factors, Downloads, and continued paper growth

IEEE TPEL is the most downloaded IEEE Transactions

PELS Magazine has 2 new columnists (Kristen Parrish – Industry perspectives, Trishan Efram – Patents) and new Ads team

JESTPE and TTE backlog shorter now with increase page counts

OJPEL – Best Paper Award approved. 2nd fastest OA journals in IEEE. Will receive IF mid-2023

Recent PRAC Reviews: TPEL and Magazine in June 2022, TTE PRAC review in November 2022, JESTPE in April 2023, OJPEL in November 2023

Project finished: TPEL Keywords Updated on Manuscript Central (better matching of reviewer expertise to subject of paper)

IEEE TPEL overlength page charge is \$200 after page 10 instead of (2022) \$162 after page 8 for papers submitted in 2023

Welcome new EiC of TPELs: Giovanna Oriti, Brendan McGrath, Xinke Wu

Summary of PELS publications page count

Journal	2019	2020	2021	2022	2023
TPEL	12,000	13,200	14,350	16,000	16,800
JESTPE (50%)	2,600	4,500	7,500	8,000	8,000
TTE (45%)	1,500	1,800	3,200	4,750	5,250
OJ-PEL		546	685	800-->971	880-->1000
Magazine	380	393	388	388	400

Motion from Products committee to Change the title of “EiC of Letters” to “Executive Editor of Letters”

Motion passes

Motion from Products committee to appointment of Executive Editor of TPEL Letter; Appointment of Xiongfei Wang as Executive Editor of TPEL Letters. April 1, 2023 – Dec 31, 2025.

Motion passes

Motion from Products committee to approve the following budgets:

Journal	Total Pages	Increase from 2023	PELS portion Finance impact from 2023 (estimate)	Comments – Costs after author overlength page charges
TPEL	16,800pp	0	0	~ \$0 cost.
JESTPE (50%)	7500pp	0	0 (50%)	~ \$0 cost.
TTE (45%)	6000pp	750pp	\$16k	~ \$0 cost. (Project positive revenue)
OJ-PEL	1000pp	20pp	\$0	Authors pay
Magazine	450pp	50pp	\$2.3k	Pages do not include advertising

**2024:** | ~\$20k increase

Motion from Products committee 50% discount of IEEE and PELS membership for 3 years for TPEL Outstanding Reviewers.

Motion passes

*Comment from Phil Krein: Please do not forget that IEEE has constrained member discounts; any member can only select one. For many members, adding a discount is not helpful.*

Motion from Products committee to approve Admin support for TTE from the previously approved \$34k USD per year to \$45k EUR per year.

Motion passes

Presented a review of Industry and Standards Portfolio, Operational Structure, and summary of main initiatives

Propose Workshops to develop New Roadmaps

- Workshop on High-Power Electronics (incl. HVDC / MVDC)

Industry Committee New Initiatives

- WFD: Credentialing; IEEE Chip Act Task Force; Supporting & Influencing Conferences; Regional Engagements

Standards Committee Initiatives

- PAR Training with IEEE-SA
- PAR & ETTC & SCC Meetings
- IEC & CIGRE Standards Coordination

Motion from Industry and Standards committee to Approve new Operating P&P Documents

Motion passes

Motion from Industry and Standards committee to approve the 2024 budget: 115k

- Roadmaps
  - New Roadmaps: 2-3 Workshops at Conferences - \$ 10k
  - ITRW-2.0 Operational Budget – \$ 20k
  - ITRD Operating Budget – \$20k
- Industry Committee Initiatives
  - IEEE Task Force and the Chip Act – WFD – \$ 5k
  - Industry Roadshows - \$10k
- Standards Committee Initiatives
  - PAR Training - \$ 5k
  - PAR & ETTC Meetings – \$ 10k
  - IEC Coordination Workshop – \$ 15k
- I&S Operational Budget
  - Committee Travel – \$10k
  - Distributed Support Function
  - Other - \$ 10k

Motion Passes

Changes in the Bylaws and P&P Document were distributed and can be explained by Katherine

- Standing Committee Educational Activities
  - Digital Media and Education Committee
  - Educational Videos Committee
  - PhD Schools Committee
  - Scholarships & Fellowships Committee

Global relations updates:

- Support of the VP of Conferences in the relationship to EPE
- ECPE: Continuing and strengthening the dialogue already started
  - Interest of ECPE for TCS of the workshops and seminars
  - Personal meetings of the leaderships (PELS-ECPE) will follow in person
- Regular meetings with CPSS
- Meeting with Korean KIPE before ECCE Asia is in planning
- Unfortunately, periodical meetings with PSMA should be retaken
- Fellowship and Scholarship program / flagship program (Starting January 2023)
- PhD Schools
  - For 2023: Colombia, Mexico, India, San-Diego alongside the IEEE WPTCE conference
  - Interest is growing!!
  - A committee was established: Advising new events, Supervision, Deciding about applications

- Lumpsum 5kUS\$ per event, total sum 50kUS\$ for 2023, simple agreement
- For 2024: increase the lumpsum up to 10k US\$ if necessary
- Digital Media update
  - Expand on Podcasts, continue with PELS PhD Thesis Talk, PELS Puzzle – Launched in October 2022, Webinars, topics on AI and ChatGPT in planning
  - Ongoing development PELSTUBE, Katherine Kim, EIC

Motion from Global Relations/Education Activities committee to approve the following 2024 budget of 91k.

- Digital Media 18k
- PELS-Tube 13k
- PhD Schools 60k
- Total Educational Activities 91k

Motion passes

VP of Technical Operations Pat Wheeler

Review of PELS 12 TC's, 2022 all male chairs, as of 2023 we now have a female chair.

25% of Secretaries; 9% of Chairs and 9% of Vice Chairs are Female (cf 6% of eligible PELS members)

Comment from Phil Krein: We have one more technical committee (that is not a subcommittee): The Electronic Transformers Technical Committee. ETTC was, with what is now TC1, one of the first two technical committees of the society. Please can we identify ETTC as TC13? – Johan Enslin, this is being discussed

Motion from Technical Operations committee to approve the 2024 budget

TC	Budget	Student Travel
1	\$12,000	\$16,000
2	\$16,600	\$10,000
3	\$16,500	\$5,000
4	\$14,000	\$15,000
5	\$18,500	\$9,000
6	\$16,000	\$16,000
7	\$14,000	\$9,000
8	\$10,000	\$15,000
9	\$20,500	\$10,000
10	\$17,000 +\$35,000 for MagNet	\$15,000
11	\$16,500	\$8,000
12	\$12,000	\$6,000
<b>TOTAL</b>	<b>\$218,600</b>	<b>\$134,000</b>

Financial Implications: \$317,600 from Technical Operations fund with \$35,000 from PELS 3% rule/initiative spend

Motion from Technical Operations Committee to approve to \$48,000 from the IEEE Power Electronics Society to support the 2024 International Future Energy Challenge Updates (IFEC) contingent upon the approval from IAS, PES, and PSMA and update to TABARC.

Description: Annual funding for the 2024 International Future Energy Challenge Updates. Sponsored by the following:

Funding requests from other societies:

PELS: \$40k IAS: \$25k; PES: \$15k; PSMA: \$10k

Motion passes

VP of Membership Mark Dehong

Membership summary presented, 11% growth in 2022 with over 12k members.

Chapters are growing, now up to 240; 48 new chapters in 2022.

Progress in 2022- mentorship kicks off again, increasing influential WIE and YP events, successful PELS Day, 60 DL and 12 RDL seminars, membership promotion code shared.

Shared strategy and plans for 2023-2025 strategic plan

Motion from Membership Committee: Approve Young Industrial Engineer Membership Support Program to support former PELS graduate student members becoming PELS members after joining the industry (ie: provide them with discount for 1st year:75% discount, 2nd year: 50%. 3rd year: 25% of IEEE fee and free PELS fee after they join the industry)

Motion passes

Motion from Membership committee to approve an amount of \$6k to support PELS BEST SBC Awards increasing from 1 to 3 awards.

Motion passes

Motion from Membership committee to approve \$32K for the ongoing operation and initiative of Diversity and Inclusion (WIE) in To approve \$38.5K for the ongoing project of Society Growth, Branding, and Recognition in 2023 budget the 2023 budget.

Motion passes

Motion from Membership Committee to approve \$38.5K for the ongoing project of Society Growth, Branding, and Recognition.

Motion passes

Motion from Membership Committee to approve \$25K for PELS Day recognition and program in PELS 2023 budget in 2023 budget.

Motion passes

Motion from Membership Committee to approve \$24K for 2023, and \$30K for 2024 for the ongoing activities of Mentorship and Career Development.

Motion passes

Motion from Membership Committee Approve Student Branch Chapters Support Program to support membership growth with investment in sustainable pipeline. (US\$250 annual support for ALL SBCs in good standing with additional merit-based support of \$750)

Motion passes

Motion from Membership Committee approve additional Chapters Support of \$250 per solo chapter/\$125 joint chapter (on top of \$250 annual support)

Motion passes

Joint Motion from Membership Committee and Global Relation Committee to approve 50K for PELS Regional Membership Support Program to accelerate membership growth globally.

Motion passes

#### Nominations Report

Liuchen Chang

Review of the committee's responsibilities and tasks – Timeline shared; the committee plans on starting the petition process earlier this year

Motion to approve 3 new members to the committee to serve a 3 year term, 2023-2025: Vivek Agarwal, Kevin Hermanns, Issa Batareseh

Motion passes

#### Constitution and Bylaws

Katherine Kim

Reviewed proposed changes to Bylaws –VP Global Relations to VP Education

New Description: "is responsible for educational activities and all relations with other professional societies (IEEE and non-IEEE) as well as being chair of the Global Relations Committee and Educational Activities Committee."

- Align and add standing committees by adding a standing Educational Activities Committee

–

Motion: Approve the P&P documents for standing committees on Conference, Global Relations, Industry, and Educational Activities.

- Standing Committee Policies and Procedures (P&P)

- Updated Documents
  - Conference Committee
  - Global Relations Committee
- New Documents
  - Industry Committee
  - Educational Activities Committee (future standing committee)

Move Pat Wheeler

Second Mark Dehong

Motion passes

#### Diversity, Equity and Inclusion & WiE

Frede Blaabjerg

Formalize diversity training and guidelines, perhaps also adding mentorship plans for women, YP, and industry members

#### Goals

- More members in DEI steering committee – more will be added
- Create guidelines and oversight to ensure all PELS sponsored conferences have diverse leadership, especially in TPC - a part of the proposal for a conference
- Encouragement to run WiE and/or YP event at any PELS financially sponsored conference. Also see women to be keynote speaker – with VP for Conferences
- Recruit actively PELS women to participate in TC's, conference organization, PELS committees, etc. – with VP's
- Each exec committee must keep diversity data on its membership and leadership and report to the DEI committee. – with VP
- Training for diversity at all leadership levels (from exec to student chapt) - look at training modules in IEEE – do that on-line
- Written guidelines, recommendations, policies and procedures to be evaluated (Frede, group)
- Comment: have an unconscious bias training for our members (Stephanie Buttler)

#### PELS Strategic Planning Committee

Frede Blaabjerg

Review of committee and functions

Strategic work for the next two years

- Make a Strategy-plan update (incl. review) Fall 2023
- Strategy meeting at ADCOM@ECCE Asia- Close collaboration with EXEC PELS (e.g. Intersociety oriented)
- Diversity (or DEI - to be strengthened)
- LRP (August 2023 in MA, USA), plan it, invite and execute
- FEPPCON (June 2024 in ?), plan it, invite and execute
- PELS Strategy-plan 2026-2030 - make process plan to be approved in 2024

LRP'2023 Attendees :

- Strategic Committee (Liuchen, Nayara, Frede)
  - Officers (Brad, Pradeep, Jian, Ryan, Johann, Mario, Katherine, Mark)
  - Invited : Up to 6 (ideas)
  - Industry
  - Young Professional, students
  - DEI
  - Very active regions
  - Under-represented areas/regions
  - Past PELS officers/leaders from other international societies

Review of FEPPCON 2022; next FEPPCON 2024 (2023 is very busy)

- Our field is constantly emerging (Power 2 X, deep electrification, storage, PELS to SDG, Multiple Energy Carriers Systems, Quantum impact on power electronics, absolute sustainability, cross disciplinarity) – so we can make a super technical program
- Next find a host and location- Include Diversity, YP engagement in planning
- Strategic Committee (Liuchen, Nayara, Frede)
- Six members chosen by the Chair from the Technical Committee Chairs and the AdCom Members at Large
- Up to two (2) additional members. (chosen by the Committee Chair with the consent of the AdCom).



Reminder to submit award nominee by March 31.

Update shared on the statuses of submissions on each award

in release process at Tabarc:

- IEEE PELS Open Journal of Power Electronics Prize Paper Award
- IEEE Power Electronics Society Value to Industry and Practitioners (VIP) Best Paper Award (→ conference committee, OJ-PEL)

**Motion from Awards Committee:**

**Motion to finalize and subsequently introduce the IEEE Milan Jovanović Award for Translational Research in Power Electronics**

- Description:—yearly award, 5000-10000USD, being sponsored via IEEE foundation—for a person’s exceptional contributions to the field of power electronics through accomplishments in transferring knowledge or ideas between academia and industry—to be finalized prior to submission to Tabarc → sponsor, foundation etc.

**Motion to introduce the IEEE International Challenge in Design Methods for Power Electronics**

- Description:—yearly software challenge for student teams (1/school)—1st prize 10kUSD, 2nd prize 5kUSD, 2\*3rd prize 2500USD, +honorable mention max. 3\*1000USD each plus certificate +travel refund—→ TC10 Financial Implications: 1st year 10kUSD from PELS/TC10 budget+20kUSD from industry sponsors (to be continued this way)

**Motion to introduce a new general rule initially for new awards: reimbursement of costs for awardees**

- Description: 1kUSD or 2kUSD with >6h flight for travel to the award ceremony, related accommodation, conference fee

**Motion to release the revised IEEE PELS Operations Manual of Awards Committee to cope with change of IEEE Technical Activities Board’s Operations Manual of February 2023**

- Description: release on PELS level of: conference awards/contests TC awards chapter/student branch chapter awards

**Motion tabled due to title IEEE PELS Outstanding Achievement Award for “Electronics Grid” proposed: to introduce the IEEE PELS Outstanding Achievement Award for Electronic Grid Technology**

- Description:—plaque+1500USD+travel refund—→ TC8 Financial Implications: yearly 3000USD from PELS/TC8 budget

## PELS History

Ger Hurley

Seeking more digital media and oral history- recommended to reach out to Arjit Banarjee, on digital media committee  
New PELS Milestone proposed, Anderson Bridge - To measure inductance. Reported in 1891 Philosophical Magazine, Queen’s College, Galway. Supported by UKRI Section and UK PELS Chapter. Submitted March 2023

## Empower a Billion Lives Update

Deepak Divan

Presented by Sanjib Panda- Global final at APEC 2023.

Over 100 Teams submitted Concept Papers in 2022. A Full Proposal round followed.

31 Teams were ultimately selected to Field-test in an energy access community.

6 student teams were allowed to test locally

25 teams participated in the Global Final, judging on 19 & 20 March 2023.

Team Nanoe - Madagascar – Global Grand Prize

Next steps:

- The Energy Access Committee will continue to work with TC-12 to produce special sessions at PELS conference
- The Energy Access Committee plans to hold 3 online workshops in 2023/2024
- The Energy Access Committee will also start the process within IEEE TAB ARC – to formalized the Awards process for alignment with IEEE procedures.

## Adjourn

**MOTION from To Adjourn 6:23 PM Frede Blaabjerg**

Move: Katherine Kim

Motion passes