

**MINUTES**  
**Administrative Committee**  
**IEEE POWER ELECTRONICS SOCIETY**  
**Hyatt Regency Hotel**  
**Phoenix, Arizona USA**  
**10 September 2000**

Officers	
President Operations V.P. Meetings V.P. Treasurer Senior Past President Junior Past President Division II Director	<b>Philip Krein</b> <b>Thomas Habetler</b> <b>Kevin Fellhoelter</b> Vacant <b>Thomas Jahns</b> <b>Jerry Hudgins</b> Barry Brusso

Members at Large (and terms)		
1998-1999-2000	1999-2000-2001	2000-2001-2002
Jaime Arau <b>Arthur W. Kelley</b> Francesco Profumo Rene Spee J. Daan van Wyk Thomas G. Wilson, Jr.	Hirofumi Akagi Dusan Borojevic <b>William G. Dunford</b> <b>Mark Jacobs</b> Keyue Ma Smedley <b>Katsuichi Yotsumoto</b>	Jan A. (Braham) Ferreira D. Grahame Holmes Jose Antenor Pomilio Seth R. Sanders F. Dong Tan Tore M. Undeland

Operations Committees			
Asian Liaison Automotive Power Awards Chapter Development Computers in PE Constitution/Bylaws Education Activities ETTC European Liaison Fellow Evaluation History	Tatsuo Sakai <b>Randy Frank</b> <b>Chris Riddleberger</b> Jaime Arau Steven Leeb Keyue M. Smedley Dean Patterson John DeCramer Javier Uceda J. Daan Van Wyk Laura Steffek	Intersociety Liaison Long-Range Planning Membership/Publicity Newsletter Power Packaging Publications Region 9 Liaison Standards Transactions Electronic Media	<b>Jerry Hudgins</b> <b>Thomas M. Jahns</b> <b>Enrico Santi</b> <b>Gene Wester</b> Douglas Hopkins Francesco Profumo Miguel Velez-Reyes Jason Lai <b>Arthur W. Kelley</b> <b>Arthur W. Kelley</b>

Meetings Committees			
Meetings PESC Steering	<b>Kevin Fellhoelter</b> <b>Thomas Habetler</b>	Telecomm Energy	<b>Robert Jurewicz</b> <b>Mark Jacobs</b>

President's Committee	
Nominations	<b>Jerry L. Hudgins</b>

PELS Administrative Office			
Administrator	<b>Robert Myers</b>	PELS Office	Lee Myers

PELS Representatives	
TAB New Technologies Directions Committee	Seth Sanders
TAB Public Relations Committee	TBD
Society on Social Implications of Technology	William E. Sayle
IEEE Press Books	<b>William Hazen</b>
TAB Transactions Committee	<b>Arthur W. Kelley</b>
TAB Newsletters Committee	<b>Gene Wester</b>
IEEE Standards Board	Jin-Sheng (Jason) Lai
TAB Intelligent Transportation Committee	Dean Patterson, Seth Sanders
GOLD Program	James Kokernak
PACE Representative	Robert Bruce
APEC Steering Committee	C. Mullet, F. D. Tan.
Past Presidents	
William E. Burns III (Council 1984-86)	Fred C. Lee (1993-94)
John Kassakian (Council 1987, Society 1988)	<b>Thomas M. Jahns (1995-96)</b>
Pierre A. Thollot (1989-90)	<b>Jerry L. Hudgins (1997-98)</b>
Thomas G. Wilson, Sr. (1991-92)	

**ACTION ITEMS:**

**Dean Patterson will contact authors presenting tutorials at Society conferences to seek tutorial summaries for the PELS Newsletter and the Society webpage – Deferred until the first AdCom meeting of 2001.**

**Gene Wester and Bob Myers will study costs and benefits of printing and mailing the Newsletter with an outside vendor and, if warranted, an outside source be put in place as soon as practical.**

**The Publications Committee will explore adding indices of papers and authors for the Society Transactions dating to its first volume in 1986, with such information made available to members.**

**The Publications Committee will prepare a plan for digitized proceedings for Society conferences and workshops to be made available on-line to all members no sooner than six months after the close of a conference.**

**Phil Krein will contact presidents of sponsoring societies of the Machines and Drives Conference to encourage expanding the role of the steering committee.**

**Tom Habetler will develop a plan for supporting new activities as a means of attracting new technical interests and members.**

**The chair of the Publications Committee will develop a plan for publishing electronic letters on line as a separate activity from the Transactions or Newsletter and will present the plan at the next meeting of the AdCom.**

**Bob Myers will write Arthur Kelley formal authorization to dispose of an old computer transferred when Kelley became Society webmaster.**

**Krein and Enrico Santi will finalize a membership survey and produce and distribute the survey to PELS members.**

**Krein will contact IEEE headquarters seeking a procedure for asking members for permission to be included in e-mail lists.**

## **MOTIONS**

**Approved an intersociety agreement among PELS, IAS, IES and PES involving joint memberships in all four societies and other intersociety activities.**

**Authorized the implementation of a new technical organization under the leadership of the Vice President-Operations with initiation of the plan in conjunction with PESC'02.**

**Agreed to include the Southeast Michigan Section as a co-sponsor of the 2000 Workshop on Automotive Electronics and to provide the workshop seed money of \$2,000.**

**Adopted an amendment to the Society Bylaws authorizing all past Presidents of PELS as ex-officio members of the AdCom.**

**Granted Dean Patterson authorization, subject to Society President approval, to designate up to \$3,000 for an EPE workshop in Europe in March, 2001, any allocation to follow a meeting of two workshop principals in Rome in October.**

**Allocated \$2,000 from the 2000 education budget for expenses for designated representatives of student teams to attend a meeting of the organizing committee of the Future Energy Challenge competition in Florida in November.**

**Approved a regional lecturer program proposed by Jaime Arau and amended to specify two or three lecturers in the initial phase.**

President Phil Krein convened the meeting at 8:02 a.m. and outlined the course of the meeting, then led a round of self-introductions (Attachment A). The agenda was reviewed and Krein added items covering outsourcing the newsletter and archival activities in connection with the Transactions and conference publications. The agenda was approved as was the minutes report of the June AdCom meeting in Ireland.

Krein outlined Society actions since the June meeting:

1. Confirmation of budget changes through TAB.

2. Approval by TAB for intersociety electronic publication (joint electronic access to six sets of Transactions). It is included in the new IEEE membership brochure.
2. Confirmed budget changes associated with the INTELEC activity as authorized by the AdCom in June.

**Action Item Review:**

*Dean Patterson will contact authors presenting tutorials at Society conferences to submit tutorial summaries for the PELS newsletter and the Society web page - in progress with a detailed report scheduled for the next meeting of the AdCom*

*Wording will be developed for a Bylaws amendment to permit non-voting membership of former Society Presidents on the AdCom – new wording for section 3.4 of the Bylaws was approved (see Constitution and Bylaws report).*

*A member survey draft will be located as a basis for a 2001 survey – The survey draft was found and a new format devised (see Membership report).*

*Jaime Arau and the Awards Committee will develop a program for regional speakers before local chapters and sections will recommend implementation – Chris Riddleberger introduced a proposal from Arau for action (see Chapters report).*

Krein said production of the Newsletter has been marked by long delays between camera-ready submission and actual mailing. He introduced a **MOTION: that the Newsletter Editor and the Society Administrator study costs and benefits of printing and mailing the Newsletter with an outside vendor; if it is determined that costs are lower than IEEE and quality of service is higher, mechanical production and distribution of the Newsletter be moved to an outside source or sources as soon as possible.** Tom Habelter voiced the formal motion, Jerry Hudgins provided a second and the motion was adopted.

Krein recommended that the Society examine a means of adding electronic access to the *Transactions on Power Electronics* back to its first volume in 1986 and that electronic access to backfiles be available to PELS members. Habetler moved **MOTION: that the Publications Committee examine adding a Transactions backfile all the way back to volume 1 to electronic access product packages, at least for members, and to present a proposal, including costs, at the next AdCom meeting.** Randy Frank seconded the motion and it was approved by unanimous voice vote. There was also discussion of including author and subject indexes for conferences in current and future end-of-year Transactions issues.

The President suggested that Society membership include electronic access to all available proceedings of PELS-sponsored conferences and workshops, effective in 2002 or sooner if possible. Krein offered a time-delay of six weeks between the conference and availability of proceedings to encourage conference attendance. In discussion, it was agreed to adjust the time-delay to six months. Krein said, "why not allow our members to access conference publications? Electronic access is a reality so we should offer it to our members with a delay factor to benefit attendees at conferences." A formal **MOTION: Beginning in 2002, or sooner if possible, the membership fee shall include electronic access to all available PELS conference and workshop**

**proceedings. New proceedings shall be added not sooner than six months after a conference** was offered by Bill Dunford, seconded by Arthur Kelley and approved.

In a companion issue, Krein proposed that all proceedings of Society-sponsored conferences and workshops be made available electronically to members on the web. Hudgins moved **MOTION: that the Publications Committee prepare and implement a plan to digitize all pre-1988 proceedings for APEC®, PESC® and INTELEC® and sponsored workshops, including those which may not be available electronically at present.** Bill Hazen seconded the motion and it was approved. Krein said the Society will need to plan to fund the project as a new initiative for 2002 and where necessary will utilize publications-related funds prior to 2002.

### **Election Results**

Hudgins announced the results of the election conducted in August and early September for 2000 Society officers and at-large AdCom members. He said 36 of 40 eligible voters participated in the election. Results:

President – Tom Habetler

Vice President-Operations – Dean Patterson

Vice President – Meetings – F. Dong Tan

At-Large AdCom – Rik DeDoncker, Johan Enslin, Kevin Fellhoelter, Hirofumi Matsuo, Rene Spee, Charles Sullivan

### **Future Energy Challenge**

Krein reviewed progress in development of the competition, noting that a letter of intent to participate must be received by Friday, September 15. The competition involves inverter design for 10 kW fuel cell systems and prototype construction of a 1.5 kW inverter.

The organizing committee is headed by PELS with IES and IAS involved as sponsors. Grand prize is \$50,000 from the Department of Energy with \$25,000 available from the Department of Defense for other awards. He encouraged participation from all power electronic and related disciplines at North American universities. Responding to a question from Tom Jahns, he said an effort is underway to seek funding for program development from the National Science Foundation.

### **Intersociety Agreement**

The President outlined a proposed intersociety agreement authorizing a joint membership in PELS, IAS, IES and PES to further cooperation and joint activities. The full text had been sent to AdCom members previously by e-mail. The agreement permits merging of society chapters but encourages strong chapters in the four societies to remain autonomous. The level of any society financial support for individual joint chapters will be based on the percentage of each society's membership in that chapter.

Distinguished Lecturer costs involved in providing chapters with speakers under this program will be paid by the society providing the specific speaker. Jahns moved **MOTION: that PELS approve the intersociety agreement as presented and subject to any minor adjustment.** Hudgins seconded the motion and it was adopted.

## President's Report

1. An intersociety meeting in Vancouver, British Columbia in June focused on completion of the group membership agreement this year. Krein said the four societies are moving toward that objective, as witnessed by the immediate preceding approval action by PELS.

2. The Machines and Drives conference at MIT in 2001 has dates in direct conflict with PESC'01. He said better cooperation and communication is needed. The conflict pointed up the need, he said, for the steering committee for the Machines and Drives conference to be involved with planning and implementation – that the steering committee was not consulted about the schedule. There was agreement that the four societies insist that the steering committee become an integral part of the conference. Bob Jurewicz suggested a conference calendar be maintained and updated on a regular basis. **ACTION: Krein will contact the presidents of the other sponsoring societies to encourage strengthening of the role of the steering committee.**

3. PELS is one of the five fastest growing societies in IEEE this year with a growth rate of 5.8 percent. The growth is particularly welcome, Krein said, because overall society memberships are declining, even in a year when IEEE membership is growing.

News from IEEE - Krein said a new budget process is in place, requiring significant advance planning for new initiatives and activities.

A Technical Activities Board retreat was held a month ago in Dallas – a brainstorming session. A result, Krein said, is that TAB can be expected to develop new ways to support emerging topics and special interest groups. A major concern of retreat attendees was a lack of a "home" within IEEE for key emerging areas such as wireless communications and biotech. A key message, he said, was the encouragement of societies to embrace key current issues with fewer concerns about "turf" or scope issues.

Relating to specific power electronics issues, Krein said the Society needs to continue expanding its vistas to include all areas of the discipline – power quality, batteries, small alternative energy systems, electric and hybrid vehicles. He asked, should PELS contact special technical interest groups and invite them to bring their expertise into the Society as an expansion of the area of interest? He suggested that the Long-Range Planning Committee address the issue, perhaps developing specific technology contacts within the Society membership.

Habetler proposed one way of attracting new technical interests was the support of new conferences and workshops, saying some groups organizing new activities expect financial support with no obligation to repay. He and Krein agreed that an initial funding in the first year or two may be acceptable to build an activity but in time PELS must regard funding as an investment and expect a return based on surplus. Habetler said decisions must be made on merits but where does the decision rest – with Meetings, Standards, Long-Range Planning – as an activity usually crosses several disciplines. **ACTION: Habetler will develop an action plan for backing new activities.**

Krein said a key point within IEEE is that although the technical societies generate both the intellectual property and main funding for IEEE, societies hold fewer than one-third of the seats on the IEEE Board of Directors and there is even a sentiment expressed at one level that division directors do not in fact represent societies in many cases (in the case of PELS, or representation through Division II has been consistent and effective).

### **Treasurer's Report**

Krein presented a Treasurer's report, saying that most 2000 expenses within the Society are below budget, particularly in administrative categories. Conference income continues to be strong. So far, he said, none of the various financial proposals being discussed in TAB and at higher levels will have serious impacts on PELS. The current net worth of the Society is \$1.41 million and long-term investments are nearly \$900,000 and short-term approaching \$450,000. For the 2001 budget, Society expenses are scheduled to run \$820,000.

The Society's performance in closing conferences is excellent – only one conference remains open after one year – the 1999 Machines and Drives Conference.

Krein outlined the new IEEE "concentration banking" program requiring all US conferences to use a central bank account established at Mellon Bank of Pittsburgh (Attachment B)

### **Vice President – Operations**

No report

### **Highlighted Committees**

Long-Range Planning – Jahns reported the committee at a meeting in Ireland in June designed a blueprint for Society technical committees (Attachment C), in essence providing:

- Each PESC track will evolve into a PELS technical committee
- A committee chair will serve as a track chair for that discipline with a new committee chair appointed by the PESC chair or elected by the committee.
- Separate Transactions Associate Editor(s) will represent each committee, to be assigned by Transactions Editor
- Committee members will be available to serve as reviewers.

Jahns listed envisioned technical committees, including four existing groups:

- Controls, modeling and analysis (Krein said COMPEL has reserved this field)
- DC Power supply systems
- Rectifiers and Inverters
- Motor drives and motion control systems
- Power devices, components and packaging
- Transportation
- Telecommunications
- Electronic transformers
- Computers in power electronics
- Education

Discussion centered on creation of new committees and phasing out of inactive or irrelevant activities. Arthur Kelley said he has established a new set of categories for associate editors of the Transactions and said he would provide that list to Jahns.

Jahns said implementation of his proposed program would be aimed at PESC'02 with the Society VP-Operations taking the primary responsibility for implementation. Habetler noted that the schedule was most appropriate as the PESC'02 chair and VP-Operations are one in the same person – Dean Patterson.

Jahns moved **MOTION: That the Society approve the implementation of the new PELS technical organization under the leadership of the VP-Operations, with the goal of initiating the plan in conjunction with PESC'02.**

Jahns reviewed what was termed strategic publications issues

1. Long-Range Planning supports Kelley's efforts to use web to accelerate Transactions review and approval process.

2. The concept of electronic publication of power electronics letters is endorsed with letters up to several pages in length available on the web. The program, Jahns said, will permit quick turnaround for publishing within one or two months. He said a policy needs to be put in place to avoid any conflict with Transactions papers or overlapping topics. Hudgins and Habetler said there should be no restriction on publishing – that if an author publishes a letter he may also submit a detailed paper on the same subject for the Transactions. Habetler moved that **MOTION – the chair of the PELS Publications Committee be charged with developing an electronic letter proposal – with dissemination of letters in electronic format only - for consideration by the full PELS AdCom at its next meeting.** Habetler specified that the electronic letter program would be separate from the Transactions and would have its own editor and review team. The motion was seconded by and approved by unanimous vote, with a comment that a submitted letters must be in proper electronic format for acceptance.

3. The conversion of the PELS Newsletter into a magazine is supported as an effort to make a publication more appealing to both members and non-members. Jahns said his committee has suggested that PELS approach IAS to explore a joint magazine on power electronics. Krein said the intersociety committee at Vancouver did not object to the concept of a joint power electronics magazine, but noted the issue is far from resolution. He said it may be necessary to begin with a joint magazine and perhaps keep the Newsletter for Society news, a position echoed by Gene Wester. Krein suggested that the question be discussed with representatives of other potential power electronics magazine (particularly IAS) at a November intersociety meeting in an effort to reach a common ground. Interanally, he said the Society needs to face the questions: 1. do we replace what we have? 2. do we establish a new publication?

In another publications activity, Long-Range Planning raised the prospect of an annual CD-ROM containing the full complement of that year's transactions. The response was lukewarm with Kevin Fellhoelter commenting that the progress of technology may make such a program of short duration.



4. The committee urges PELS to encourage small workshops on special topics and regional conferences.

5. In the field of chapters and membership development, Long-Range Planning supports active cooperation with IAS, Power Engineering and Industrial Electronics societies to form joint chapters in areas with low society memberships. Further, it recommends studying new approaches to strengthening and growing chapters.

Hudgins, who as senior past president next year will become chair of Long-Range Planning, said a meeting of the committee will take place in connection with the next AdCom meeting at APEC in Anaheim, Calif., in the winter.

## **Publications**

*Transactions* – Kelley reported he has completed a transition to electronic submission of papers and presently about 50 percent of new submissions arriving in electronic format (Attachment D). The result is a dramatic reduction in the processing of an individual paper. Further, the transactions database has been installed and published on the web.

He said 30 associate editors are in place but he plans to replace several whose response time is slow or whose performance is not up to accepted levels. In general but not in every case, he said, the best performers are either young "who are impressed with the assignment" and some retired people "who want to keep active."

As far as page counts, the 1999 quota was 1,200 pages with the actual count 1,208. The 2000 quota is 1,500 pages but he anticipates only about 1,200 pages. He suggested a count of 1,300 for 2001 but Krein said the budgetary page count was required in the spring.

He is working to reorganize categories for associate editors to update areas of technology.

The major concentration, he said, is to clear up pages in the pipeline of more than one year and he anticipates essentially eliminating much of the long backlog in the next six months. Krein suggested that any long-standing papers be reviewed and resolved by a select group of AdCom members at APEC.

Kelley said a separate Transactions e-mail address has been established – [pelseditor@ieee.org](mailto:pelseditor@ieee.org). The e-mail will permit a single funnel for submission of papers and communications with the transactions editor.

Kelley said he is handling all the transactions work without any staff support but is studying the potential need for such assistance.

He said he has an outdated computer passed along by Glenn Skutt of Virginia Polytechnic when he was electronic media editor and he would like to dispose of it but needs written permission to do so. **ACTION: Myers will write Kelley authorizing disposal of the computer.** Krein advised Kelley he had control of an editor's budget and "if you think a Transactions effort needs to spend money and if the budget permits it, then spend the funds."

*Electronic Media* - Kelley said the Society needs to identify a new electronic media editor – to succeed him in this increasingly important position – who can maintain the home page and other material on a consistent basis.

*Newsletter* – Gene Wester said he is working on reducing the lag time between on-line publication of the newsletter and printed version. As noted earlier, he and Myers are exploring outsourcing printing and distribution of the newsletter outside of IEEE.

Wester said he is continuing to develop book reviews and has had some success but wants to identify an expanded cadre of reviewers to assure a plentiful supply and to avoid facing last-minute frantic solicitations.

*IEEE Press* – Bill Hazen submitted a written report (Attachment E).

**Membership** – Enrico Santi said he had revised an earlier membership survey to reduce the length to make it more manageable and increase chances of wide response (Attachment F). He said he trimmed the number of questions from 32 over nine pages to 20 questions on an anticipated four pages. In an AdCom review of the suggested submission, several revisions were developed and **ACTION: Krein and Santi will finalize the form, review with IEEE and proceed with producing and distributing the survey.** It was decided to use a survey office at one of the universities to compile results.

The AdCom adjourned temporarily at 2:18 p.m., for a Meetings Committee meeting.

The AdCom meeting was reconvened at 3:07 p.m.

### **Vice President – Meetings**

Reporting on Meetings Committee actions, Kevin Fellhoelder moved that **MOTION: the Society approve the Southeast Michigan Section as a co-sponsor of the Workshop on Automotive Electronics and, further, that the Society provide \$2,000 in seed money.** The motion was approved by unanimous action.

### **Constitution and Bylaws**

Myers introduced a motion from Keyue Smedley and the Constitution and Bylaws committee (Attachment G) adding a sentence to Society Bylaw section 3.4 covering action by the AdCom earlier in the year designating all past Society presidents as ex-officio members of the AdCom without vote. The Bylaws section was adjusted to read in full (additional language in italics):

"3.4 Past Presidents

The two most recent retiring Society Presidents shall be known as the Past Presidents and shall be ex-officio members of the AdCom with vote. *Other retiring Society Presidents shall be ex-officio members of the AdCom without vote.*"

Riddleberger moved **MOTION: adoption of the amendment and initiation of the process for TAB and membership approval.** The amendment was approved.

## Education Activities

A written report from Dean Patterson included a request from Tore Undeland for support for the E-TeM<sup>2</sup> event organized by the EPE association in Belgium in March, 2001 (Attachment H). The Patterson report said he planned to speak with organizers, including Undeland and Brigitte Sneyers, at the IAS meeting in Rome in October.

A written motion from Dean Patterson was presented: **MOTION: That Patterson, following discussion with Brigitte Sneyers and Tore Undeland at the IAS Annual Meeting in Rome to determine a detailed proposal, be authorized, subject to approval by the Society President, to allocate up to \$3,000 for E=TeM<sup>2</sup> March 2001.** The motion was approved.

Krein said a request had been received to allocate \$2,000 for expenses to be incurred by students involved in the planned Department of Energy Future Energy Challenge to attend a meeting of the organizing committee at Orlando in November. Jahns moved that **MOTION: the Society grant \$2,000 from the Society 's 2000 education budget or the springboard meeting for the Future Energy Challenge competition with the funds to be channeled to cover attendance by representatives of participating student teams.**

## Awards

Riddleberger asked that members of AdCom consider possible nominations for the Society Distinguished Service Award and Richard Bass Outstanding Young Power Electronics Engineer. He said it appears there will be sufficient nominations for the William Newell Award. Deadline for nominations is January 15, 2001.

Regarding ongoing efforts to upgrade the Newell Award to a Field Award or other Institute award, Riddleberger said one alternative is an IEEE medal and he said he will pursue a medal proposal or a Field Award. As a possible fallback position, the monetary ceiling for a Society award has been increased to \$10,000, the same cash limit as a Field Award.

## Chapter Development

Riddleberger said he had received a message from Jaime Arau regarding an action item from June specifying that Arau and Riddleberger develop a regional lecturer program. There was agreement to authorize Arau to proceed with a program amended to specify two or three lecturers (instead of up to five) and use of a descriptive word other than "distinguished." Riddleberger moved **MOTION: approval of a regional lecturer program.** Dunford offered a second and the motion was approved.

## PACE

A written report was submitted by PACE Chair Robert Bruce (Attachment I).

## **New Business**

Jacobs asked if the Society could develop the means for an e-mail communications network linking all PELS members. Krein and Kelley said unsolicited e-mail contacts are not permitted under IEEE Policy and Fellhoelter suggested that the IEEE membership renewal form contain a check-off box to authorize e-mail reception of e-mail notices from the Institute or a society. After the meeting, Krein cited two IEEE policy items regarding e-mail:

“1. IEEE policy does not permit someone to be added to an e-mail list without explicit permission. Please do not create e-mail lists for general purposes unless the individuals involved have given consent.

“2. For privacy reasons, e-mail messages should not include addresses of a number of recipients. To avoid sending an address list with a message, one method is to send the message to yourself and put the recipient list in the ‘blind copy’ (BCC) field. Then no one will see the recipient list.”

**ACTION: Krein will contact IEEE headquarters to determine a procedure for asking members for their permission to be included in e-mail lists.**

The meeting was adjourned at 3:55 p.m.

Submitted,

Robert Myers  
PELS Administrator.