

**THE ADMINISTRATIVE COMMITTEE  
THE IEEE POWER ELECTRONICS SOCIETY  
Disneyland Hotel  
Anaheim, California USA  
4 March 2001**

<b>Officers</b>	
President Operations V.P. Meetings V.P. Treasurer Senior Past President Junior Past President Division II Director	<b>Thomas Habetler</b> <b>Dean Patterson</b> <b>F. Dong Tan</b> <b>Steven Leeb</b> <b>Jerry Hudgins</b> <b>Philip Krein</b> <b>Thomas Jahns</b>

<b>Members at Large (and terms)</b>		
<b>1999-2000-2001</b>	<b>2000-2001-2002</b>	<b>2001-2002-2003</b>
Hirofumi Akagi Dusan Borojevic <b>William G. Dunford</b> Mark Jacobs <b>Keyue Ma Smedley</b> Katsuichi Yotsumoto	Jan A. (Braham) Ferreira D. Grahame Holmes <b>Jose Antenor Pomilio</b> Seth R. Sanders <b>F. Dong Tan</b> Tore M. Undeland	<b>Rik W.A.A. DeDoncker</b> Johan H.R. Enslin <b>Kevin Fellhoelter</b> Hirofumi Matsuo <b>Rene Spee</b> <b>Charles Sullivan</b>

<b>Operations Committees</b>			
Asian Liaison Automotive Power Awards Chapter Development Simulaton,/Modeling & Control TC Constitution/Bylaws Education Activities ETTC European Liaison Fellow Evaluation	Tatsuo Sakai <b>Randy Frank</b> <b>Chris Riddleberger</b> <b>Jaime Arau</b>  Antonelli Monti <b>Keyue M. Smedley</b> <b>Marcelo Godoy Simoes</b> <b>John DeCramer</b> <b>Rik W.A.A. DeDoncker</b> <b>J. Daan van Wyk</b>	History Intersociety Liaison Long-Range Planning Membership/Publicity Newsletter Power Packaging Publications Region 9 Liaison Standards Transactions Electronic Media	William E. Sayle <b>Dean Patterson</b> <b>Jerry Hudgins</b> Enrico Santi <b>Gene Wester</b> <b>Douglas Hopkins</b> <b>Ron Harley</b> <b>Miguel Velez-Reyes</b> <b>Jason Lai</b> <b>Arthur W. Kelley</b> <b>Philip Krein</b>

<b>Meetings Committees</b>			
Meetings PESCS Steering	<b>F. Dong Tan</b> <b>W. G. Hurley</b>	Telecomm Energy	<b>Robert Jurewicz</b> Mark Jacobs

<b>President's Committee</b>	
Nominations	<b>Philip Krein</b>

PELS Administrative Office	
Administrator	<b>Robert Myers</b>
PELS Office	<b>Lee Myers</b>
PELS Representatives	
TAB Public Relations Committee IEEE Press Books TAB Transactions Committee TAB Newsletters Committee IEEE Standards Board TAB Intelligent Transportation Committee APEC Steering Committee	Enrico Santi William Hazen <b>Arthur W. Kelley</b> <b>Gene Wester</b> <b>Jin-Sheng (Jason) Lai</b> <b>Dean Patterson</b> <b>C. Mullet, F. D. Tan.</b>
Past Presidents	
William E. Burns III (Council 1984-86) John Kassakian (Council 1987, Society 1988) Pierre A. Thollot (1989-90) <b>Thomas G. Wilson, Sr. (1991-92)</b>	Fred C. Lee (1993-94) <b>Thomas M. Jahns (1995-96)</b> <b>Jerry L. Hudgins (1997-98)</b> <b>Philip T. Krein (1999-2000)</b>
Guests	
<b>Tom Wilson, Jr.</b> <b>Francesco Profumo</b> <b>Glen Skutt</b>	

Bold face signifies attendance at meeting

## ACTION ITEMS

Ron Harley and Franco Profumo, with Phil Krein as an alternate, will be PELS nominees to the IEMDC steering committee.

Harley and Krein will represent the Society on an Intersociety committee to develop an IEEE Power Electronics Magazine.

Harley, Krein and Arthur Kelley will present a proposal at the June AdCom meeting for on-line power electronic letters.

Marcelo Simoes will organize a plan for conference tutorials on Society-related topics.

Enrico Santi will develop an organizing committee and a business plan for a planned videotape promoting power electronics.

Krein will lead an organizing effort for creation of a PELS Society Magazine.

Bob Myers will notify the organizer of an annual battery conference to delete PELS as a sponsor without specific Society approval.

## MOTIONS

Members approved presidential appointments of chairs to Society operating and technical committees and of representatives to IEEE organizations.

**\$25,000 will be earmarked in the 2002 budget to support Energy Challenge activities and \$10,000 will be allocated for creation of a videotape promoting power electronics.**

**Workshops in 2001 in Turkey and Jordan were approved for technical (non-financial) sponsorship.**

**The AdCom directed that a battery conference remove the Society as a listed sponsor.**

**Gene Wester and Myers were authorized to retain IEEE or select a new printer for the PELS Newsletter.**

**A survey of the PELS membership was authorized.**

**Keyue Smedley and Rene Spee were appointed at-large members of the Long-Range Planning Committee.**

Tom Habetler convened the meeting at 10:36 a.m. with a round of self-introductions (Attachment A). He asked for additions to the agenda and hearing none, declared the agenda approved as submitted (Attachment B). After a motion and second, the minutes of the 10 September 2000 AdCom meeting in Phoenix were approved as written.

Review of Action Items. Habetler suggested that items involved with committees be addressed during specific committee reports.

**- The Publications Committee will explore indices of papers and authors for the Society Transactions dating to its first conference in 1986.** Arthur Kelley said the project is being explored with the objective of preparing an index in the year 2002.

**- The Publications Committee will prepare a plan for digitized proceedings for Society conferences and workshops to be made available on line to all members.** Habetler said he had discussed the issue with IEEE and was advised the project can not be undertaken in the immediate future. He said IEEE is overburdened with prior commitments and cannot expand the effort at present.

**- Phil Krein will contact presidents of sponsoring societies of the International Machines and Drives Conference to encourage expanding the role of the steering committee.** Phil Krein said he approached presidents (Attachment C) and found them in support of strengthening the committee. Habetler noted that the 1999 conference just recently closed its books with a loss and was late submitting a budget for the 2001 event. Further, he and Krein said, the scheduling of IEMDC'2001 the same week as PESC was a serious mistake and must not be repeated. **ACTION: Ron Harley and Franco Profumo will be PELS nominees to the IEMDC steering committee with Phil Krein as alternate.**

**Tom Habetler will develop a plan for supporting new activities as a means of attracting new technical interests and members.** Several members mentioned initiating programs at conferences and meetings along with Distinguished Lecturer assignments and Habetler said ideas should be submitted to the Meetings and Operations vice presidents.

**Bob Myers will write Arthur Kelley with authorization to dispose of an old computer.**

Kelley said the computer was given to a retiring faculty member at North Carolina State University, a move applauded by the AdCom.

**Krein will contact IEEE headquarters seeking a procedure for including members in broadcast e-mail listings.** Krein said IEEE has a program to distribute material via e-mail to members and he said he would work with IEEE headquarters to make e-mail programs available.

**Actions since September meeting**

1. Appointment of chairs.

- Habetler listed appointments of Operations standing committee chairs:	
Asian Liaison	Tatsuo Sakai
Awards	Chris Riddleberger
Chapter Development	Jaime Arau
Constitution and Bylaws	Keyue Smedley
European Liaison	Rik DeDoncker
Fellow Evaluation	Daan van Wyk
History	Bill Sayle
Intersociety Liaison	Dean Patterson
Long Range Planning	Jerry Hudgins
Membership/Publicity	Erico Santi
Publications	Ron Harley
IEEE Transactions on Power Electronics	Arthur Kelley
Newsletter	Gene Wester
Region 9 Liaison	Miguel Velez-Reyes
Electronic Media Editor	Phil Krein
PESC Steering Committee	Ger Hurley

**MOTION: Krein moved confirmation of the appointments.** Rene Spee seconded and the motion was approved.

- The president reviewed proposed appointments as technical chairs:	
Automotive Power Electronics	Randy Frank
Simulaton, Modeling and Control	Antonello Monti
Educational Activities	Marcelo Simoes
Electronic Transformers	John DeCramer
Power Packaging	Doug Hopkins
Standards	Jason Lai

**MOTION: Chris Riddleberger moved the appointments,** Miguel Velez-Reyes seconded and the appointments were confirmed.

- Habetler named PELS representatives to other IEEE organizations:	
TAB Public Relations Committee	Enrico Santi
IEEE Press Books	William Hazen
TAB Transactions Committee	Arthur Kelley
TAB Newsletters Committee	Gene Wester
IEEE Standards Board	Jason Lai
TAB Intelligent Transportation Systems Committee	Dean Patterson
APEC Steering Committee	Dong Tan, Chuck Mullett

**MOTION: Krein moved the approval of the appointments,** Dean Patterson seconded and the motion was adopted.

### 2. Intersociety Cooperation

Habetler said four societies - PELS, Industry Applications, Power Engineering and Industrial Electronics - have made progress toward creation of a joint power electronics magazine - and such a journal is moving toward publication. Discussions also have covered development of power electronics technical letters by the participating societies with publication limited to on-line. He said a proposal for joint membership in the four societies had been submitted to IEEE and a list of questions and concerns had been returned. He said an Intersociety meeting on March 7 will address the membership question and delve into other issues.

### 3. Energy Challenge

Jason Lai reviewed the development of the Energy Challenge program, listing objectives, specific technical areas of competition, an awards schedule, composition of the challenge, participating universities and schedules and milestones (Attachment D). A website has been developed: <http://www.energychallenge.org>. Krein reminded the AdCom that PELS favors eventual expansion of the competition into the international arena. Further, he said, the Intersociety members support the energy challenge concept and the committee will explore new concepts and involvement. Krein said a specific proposal has been put forward by three societies - PELS, IAS, PES - to invest \$25,000 each per year to bring the competition under IEEE control and make the program fully international. Krein and Habetler said the funds will be used underwrite the program to cover administration, expenses, awards. Decisions on content of the program and timing will be determined at the Intersociety meeting March 7. Krein added that the budget item entailed a new initiative which will require approval by the IEEE Technical Activities Board.

**MOTION: Patterson moved approval of \$25,000 for Energy Challenge activities for the 2002 budget.** Rik DeDoncker seconded and the motion was approved.

## **Officer Reports**

President's Report - Habetler outlined IEEE practice the past three years of approving a deficit budget to finance new electronic products including Xplore and other on-line concepts (Attachment E). Deficits did not occur for several years because of strong returns from investments in the stock market. However, in 2000 a slowdown in the stock market resulted in a deficit of \$15 million and to correct the downfall, the existing reserves of technical societies have been assessed 12.3 percent; in the case of PELS a "tax" of \$172,000. The assessment resulted in a drop in PELS reserves to \$1,395,200. Another and possibly larger loss is anticipated for 2001 and Habetler said the societies probably will face another assessment at the beginning of next year.

Discussion centered on financial planning procedures by IEEE and the expressed hope that future decisions involving TAB funds would involve input from TAB, rather than what was termed arbitrary commitments by IEEE members and officers with no connections to TAB.

The president added that societies are being encouraged to continually increase the prices of their products per IEEE suggestions and market analyses.

Habetler said revised financial specifications require societies to submit new spending initiatives by May 1 for next-year budget inclusion. The final budget, he said, will be due August 6, roughly the same date as in the past. He reminded the AdCom that IEEE requires that all contracts and agreements exceeding \$25,000 must be submitted for approval and execution by IEEE.

He outlined the IEEE-encouraged concentration banking program and recommended that PELS conferences operating in US dollars use the system.

The president reviewed the membership status of PELS, noting a consistent 5 percent growth over the past years - "approximately the same percentage of growth as every year since I have been involved." PELS had approximately 6,300 members worldwide as of November, 2000.

He said all societies in one division (Division I) are growing but almost all societies in the other nine divisions are either losing or staying even in membership. While IEEE is growing in members, he said, most of the growth is in regions 7 through 10. In the case of PELS, 53 percent of its members reside outside the United States.

Habetler stated the objectives of the Society for 2001 and responsible individuals:

1. Formation of technical committees – Dean Patterson
2. IEEE Power Electronics Magazine – Ron Harley (IAS, PES and perhaps IES will be involved and **ACTION Harley and Krein will represent Society in developing a magazine plan.**
3. Power Electronics letters – Arthur Kelley **ACTION – Harley, Krein and Kelley will present a proposal for the June AdCom meeting for electronic dissemination of power electronics letters.** Rik DeDoncker suggested that comments on specific letters from readers and responses from authors be a feature of the letters project. Kelley cautioned against the spiraling of comment into ongoing discussions and emphasized the need for careful selection and filtering of comments.
4. Intersociety membership, chapters, Distinguished Lecturers,- Tom. Habetler who said his goal is to fully leverage activities to communicate to larger number of members
5. Conference tutorials - Marcelo Simoes **ACTION: Simoes will begin development of a plan for creating videos which may be based on tutorials presented at PELS conferences or any other Society-related topics.**
6. Society publicity video – Enrico Santi **MOTION: Rene Spee moved that \$10,000 be allocated in the 2002 Society budget to develop a video promoting power electronics. Further, he asked that Santi develop a video team and introduce a business plan at the next AdCom meeting.** Krein seconded. In discussion, Krein recommended that the target audience would be engineers and students and De Doncker suggested the video be linked to universities with power electronics curriculum. The motion was approved.

*Meetings Report* - Dong Tan reported APEC'01 expects another strong conference from the points of view of attendance, technical programs, exhibits and social activities. APEC'02 will be held in Dallas and APEC'03 will take place in Miami Beach. The conference will return to the West Coast in 2004, with a specific site to be determined.

PESC'01 will take place in Vancouver, BC in mid-June with future conferences scheduled for Cairns, Australia (2002), Acapulco, Mexico (2003), Aachen, Germany (2004) and Recife, Brazil (2005). Tan and Ger Hurley said the PESC Steering Committee is seeking invitations to host the conference in 2006 and 2007.

Tan noted that PELS-sponsored conferences in the main are closing on schedule and conferences and workshops appear to be in excellent order.

**MOTION: Krein moved that the Society approve technical sponsorship for the International Electrical Engineering Conference in Bursa, Turkey, 7-11 November, 2001, and the Jordanian International Electrical and Electronics Engineering Conference in Amman, Jordan, 16-18 April, 2001.** The motion received a second and was adopted.

**MOTION: Krein moved that PELS seek to be removed as a technical sponsor of an annual battery conference in Long Beach, Calif. because the conference has never requested PELS participation and that the conference organizers make a formal request if future Society participation is desired.** After a second, the motion was approved and **ACTION: Bob Myers will notify the conference sponsors of the decision.**

In light of workshops and conferences seeking PELS technical and, in some case, financial support, Habetler said the Society needs to develop an operating procedure to encourage and fund new conferences and workshops in emerging technologies.

Treasurer Report – Reporting for the absent Steve Leeb, Habetler reiterated that budget items for 2002 need to be submitted no later than May 1. And, based on the IEEE budget cycle, he said he will recommend that budget requests for future years be tendered at the first AdCom meeting of the year.

## **Committee Reports**

Awards - Chris Riddleberger reviewed awards presented by the Society – William E. Newell, Distinguished Service, Richard M. Bass Outstanding Young Engineer, best papers and best chapter recognitions (Attachment F). Specifications for the best chapter were developed in 2000 (Attachment G). The continuing program of Fellow selection and the Third Millennium Medallion Awards were other activities during 2000. He said the Distinguished Lecturer program will be expanded during the year under the direction of Jaime Arau.

Publications - Harley requested a volunteer to take charge of developing a business plan for development of a Society magazine. **ACTION: Krein volunteered to lead the organizing effort.**

Transactions - Kelley said an electronic program is in place and operating to receive Transactions papers – he said he used postal mail only when an electronic message bounces. Electronic publishing also has reduced the costs of publishing and increased the efficiency of the editor's operation (Attachment H).

The Transactions had 1,200 published pages in 1999 and last year the total was raised to 1,500. However, the actual page count was 1,336. This will result in a financial penalty but the end result will not be as severe because overall expenses are lower and a large portion of the penalty will be covered by reduced spending. He recommended a page count of 1,320 for 2002, a total endorsed by the AdCom, and this number will be reflected in the budget.

There are six new associate editors to succeed associates who resigned for one reason or another, Kelley said. In that context, he said he is working to revise and modernize topic areas and to assign more specific subjects to each associate editor.

Slow reviews remain a problem. He said he has maintained pressure on associate editors and reviewers to produce on time and plans to maintain the pressure to complete needed reviews. Kelley reviewed a special review program to be instituted at APEC to provide reviews of papers which have been in the pipeline for at least year. Qualified attendees of APEC may volunteer to review manuscripts available at the PELS exhibit booth and complete and return their reviews by 5 p.m. Wednesday, March 7, to be eligible for a special prize drawing for a Palm Pilot.

Newsletter - Gene Wester reviewed the publication process of the newsletter, saying he produces the printed version in Postscript and e-mails a file to IEEE for printing and distribution. The electronic version is converted to pdf format and usually is available on the web four to six weeks before the printed version,

Wester said he and Myers have reviewed alternate publishers to IEEE to speed publication. Three outside printer/mailer vendors were contacted and proposals elicited (Attachment I).

**MOTION: Patterson moved and Krein seconded that Wester and Myers be authorized to review proposals, seek new proposals as and if appropriate and to make a decision on future publishing. Further, the motion specified that the selected printed provide a performance guarantee.** The motion was approved.

Wester asked if the Newsletter should consider accepting job posting want ads. No action was taken but discussion ranged from he need for an advertising department if a want ad program is instituted to revenue generated to the volume of ads to be generated.

Electronic Media Editor - Krein reported on his progress in transferring e-mail and webpage control to his office and the installation of a new server. He outlined potential new projects which could include job posting and expansion of the site into new topic areas and coverage. Doug Hopkins suggested that the AdColm recognize additional costs necessary to carry the web to new levels, including hiring of a webmaster. Krein agreed, saying if he found the "right person" he would move toward retaining such an expert.

Krein said he estimated a need for \$4,000 in the 2002 budget for equipment for the web. Habetler specified that the publications committee could approve such an expenditure.

IEEE Press - Press representative Bill Hazen could not attend but submitted a written report (Attachment J).

Membership - Hudgins, reporting for Enrico Santi, introduced a membership survey (Attachment K) and **MOTION: moved that the survey be mailed to all PELS members with mailing and processing by IEEE at a cost of up to approximately \$5,000, not including survey compilation and analysis and postage-paid return envelopes.** The survey mailing will include a letter signed by Society President Habetler. The motion was seconded and approved.

Hudgins introduced a new PELS membership brochure, developed by Santi and Myers.

Finally, Hudgins said Marconi has entered into an arrangement with IEEE to sponsor IEEE memberships for employees, including full annual membership dues plus dues for one technical



society for one year. (Attachment L) In return, he said, IEEE and societies could offer incentives and cited reduced rates for hardcopy versions of the Transactions. Habetler said special arrangements also could include reduced rates to members. He indicated other companies might follow Marconi's lead and the result could be new society memberships.

Education - Patterson reviewed progress by his committee during the past year (Attachment M), noting that PELS has fully recovered its investment in the Power Electronics & Motor Drives video and that the product is being converted to web-based media at no expense to IEEE or PELS. Another project is the INTELEC fellowship competition in its first year and applicants have been screened for academic qualifications. A committee is in place to select a recipient.

The Society is supporting E=TM<sup>2</sup>, an educational workshop in Belgium during March which is part of the EPE-sponsored conference Electralis 2001. PELS is sponsoring the costs of two persons to promote power electronics education.

Two potential video projects were discussed at a meeting in Ireland last summer – power electronics in automobiles and an introductory course in power electronics for graduate engineers. A third project on RFI EMI/EMC issues and power line filter design has stalled and needs to be re-energized, he said.

Simoes reported that three members have been invited to prepare educational articles for the PELS website. They are: Ned Mohan (*Understanding of Electric Drives in Motion Control Systems Simplified Using a Physical Approach* and *Understanding and Designing of Switch-Mode Power Electronics Simplified Using a Building-Block Approach*), Rudy Severns (*Efficient Low Voltage Power Conversion*) and Edison da Silva (*Understanding Power Electronics Switches Configurations*). Simoes said Mohan has requested support for his workshop on "Teaching of Power Electronics and Electric Drives" and has been asked to make a formal request in writing specifying the type of sponsorship he is seeking.

Power Electronics in Transportation - Randy Frank said the December 5-6 workshop – held at Novi, Mich. - offered new programs and activities, including co-sponsorship with SAE and the MIT Consortium on Advanced Automotive Electrical/Electronic Components and Systems. The workshop attracted 71 registrants and is expected to produce a surplus of more than \$7,800, to be divided equally between PELS and the co-sponsoring IEEE Southeastern Michigan Section.

Telecommunications Energy Subgroup - Bob Jurewicz reviewed activities involving INTELEC and TELESOC and said INTELEC'2000 attracted 1,533 attendees and 153 paid exhibitors and produced a financial surplus of \$282,000 on revenues of more than \$1 million. Jurewicz asked the Society for \$10,000 for an effort to study means of expanding INTELEC which he said is growing at approximately 7 percent a year. The \$10,000 would be in addition to the \$25,000 allocated for Subgroup activities for 2001 (Attachment N). Jurewicz was asked to include the \$10,000 in his budget for 2002 and to proceed with the study, Krein and Habetler saying the funding was covered by INTELEC reserves and any shortfall would be covered.

Constitution and Bylaws – Keyue Smedley said the bylaws were revised in 2000 to authorize past presidents of the Society - beyond the two immediate past presidents - as non-voting, ex-officio members of the AdCom. Earlier, the Society membership approved a new clause in the Bylaws allowing a single candidate for Division II director, changing the

requirement from at least two candidates. Similar Bylaws changes were approved by the three other societies in Division II.

Long-Range Planning – Jerry Hudgins asked the AdCom to approve two at-large members of the Long-Range Planning Committee and **MOTION: Hudgins moved the appointment of Keyeu Smedley and Rene Spee.** The motion was approved by unanimous vote. Other members, as designated by the Society Bylaws, are Chairman Hudgins, Junior Past President Krein, Treasurer Leeb, Asian Liaison Tatsuo Sakai, European Liaison De Doncker and Region 9 Liaison Miguel Velez-Reyes

Hudgins outlined developments spearheaded by his predecessor, Tom Jahns (Attachment O), and said the committee this year will fashion a five-year plan to cover technical committees, conferences, educational activities and membership and a recommended plan will be presented to the AdCom at its fall meeting in Chicago. Despite the statutory composition of the committee, Hudgins invited any member of the AdCom to participate in developing the five-year plan.

Electronic Transformer Technical Committee - John DeCramer said the committee is developing standards in several areas and plans two days of meetings during APEC week.

Standards - Lai said two of the Society Standards Committee projects are moving toward completion. P1515 (Electronics Power Module Interface: Parameter Definitions, Test Conditions and Test Methods) has emerged from the IEEE balloting process and technical editing and was published last November. A paper at the APEC plenary session will introduce the content of the standard. P1573 (Electronics Power Subsystems: Parameters, Interfaces, Elements and Performance) has received Project Authorization Request (PAR) approval and is expected to be completed in 18 months. Two other standards projects – P1461 (Power Electronics Module Interface) and P1464 (Test Procedures for IGBT Circuit Simulator Model Validation) have been cancelled because of inactivity.

Region 9 Liaison - Velez-Reyes announced the next Society-sponsored Computers in Power Electronics Workshop will take place in Puerto Rico in the summer of 2002. Krein reported the Society and the Sociedade Brasileira de Electroñica de Potémcia (SOBRIEP) have signed an agreement of cooperation document, effective the first of this year (Attachment P).

### **Other business**

None

### **Next Meeting**

The Adcom will meet Sunday, 17 June, in Vancouver, British Columbia, immediately prior to PESC'2001.

### **Adjourn**

The Adcom adjourned its first meeting of the year at 5:13 p.m.

Submitted,

Robert Myers  
PELS Administrator