



IEEE Industry Applications Society Industrial Power Converters Committee (IPCC)

2016 Annual Meeting Minutes

Convention Center, Milwaukee (WI), USA September 19th, 2016

Introduction of members

Pericle Zanchetta, in the role of IPCC Chair, called the meeting to order at 6:30 PM. Members were requested to introduce themselves, to update their records or write their contact details in order to be included in the members' database. Nineteen (19) engineers and researchers signed up as new members. Including the new members, at present, the total strength of IPCC stands at 344.

Approval of the Agenda

The agenda was moved by Prof. Bob Lorenz for approval and seconded by Dr. Bill Peterson; the agenda of the meeting got approved.

Approval of 2015 Meeting Minutes

Minutes of the 2015 meeting were distributed electronically prior to the current meeting. Minutes from the ECCE 2014 meeting was moved by Prof. Bob Lorenz for approval and seconded by Dr. Ira Pitel. The 2015 meeting minutes got approved.

Reports from Subcommittees

Standards

Dr. Yuri Khersonsky is the Standards Chair, but he was unable to attend. He had sent his short report and Prof. Pericle Zanchetta presented the report.

The revision of IEEE Std 1662-2008 has been accomplished from ship's oriented application guide to general Recommended Practice for applications of power electronics in electrical power systems. On behave of IPCC Dr. Yuri Khersonsky balloted 23 IEEE new and revised standards related to power converters.





Fellow and awards nominations

Fellow and awards nominations of IPCC members were presented by Dr. Bill Peterson. Tsorng-Juu Liang, Blake Lloyd and Marcelo Simoes were elevated to the IEEE Fellow grade.

Seung-Ki Sul was recipient of the 2017 IEEE William E. Newell Power Electronics Award and of the 2016 Industry Applications Society Outstanding Achievement Award.

Jason Lai was recipient of the 2016 Gerald Kliman Award.

Dushan Boroyevich was recipient of the 2016 Harry Owen Distinguished Service Award.

Bill Peterson reminded to the audience that Nominations for the 2017 IEEE Richard Harold Kaufmann Award are due on January 31st 2017 and for the 2017 Gerald Kliman Innovator Award on June 1, 2017; as well Nominations of IAS outstanding achievement and IAS distinguish service award are due on March 15th, 2017.

IAS Transactions

Associate Editors acknowledgment

Prof. Leon Tolbert, IPCC Transactions Chair, recognized and presented with certificates for their efforts the 18 Associate Editors working with regularly submitted Transactions papers for the IPCC. The current AEs are:

Mahshid Amirabadi, Vivek Agarwal, Stefano Bifaretti, Huang-Jen Chiu, Daniel Costinett, Dong Jiang, Surin Khomfoi, Ke Ma, Brendan McGrath, Santanu Mishra, Marcello Pucci, Akshay Kumar Rathore, Luca Solero, Gui-Jia Su, Yongsug Suh, Xiongfei Wang, Zhiqiang Wang, Pericle Zanchetta.

IAS Transactions review statistics

Prof. Leon Tolbert presented Transactions paper review statistics. The time to first decision of IPCC over the past 12 months was 72 days. The historical average for the committee is just below the society target of 90 days. Last year acceptance rate was 56% for IPCC. It was presented the list of conferences from which the transactions papers were received. Some of them have 20% submission rule for papers eligible for Transactions review.

The guidelines on how to submit a manuscript to IPCC were presented.

- ➤ Paper first must be presented at an IAS-sponsored conference (within the last 12 months).
- Send an email to <u>tolbert@utk.edu</u> with the request to submit a paper and the following information:
 - o Paper title





- List of authors and corresponding author's email and institution
- Conference and date when the paper was presented
- ➤ An email will be sent to the corresponding author from ScholarOne Manuscripts with instructions on uploading the paper for review (usually within 1 2 weeks).
- > The conference paper version must be referenced (cited) in the Transactions submission reference list.
- > Authors are encouraged to update and add new material to the conference version of the paper.

Call for 2017 IPCC special issue on the IA Transactions

November 15th, 2016 is the deadline for proposals of Topics for the IPCC special issue on Transactions. Send an email to tolbert@utk.edu with the details of the proposal.

IPCC prize paper awards

Prof. Paolo Mattavelli, IPCC Transactions Co-Chair, presented the paper awards.

The top 7 papers presented at ECCE 2015 and accepted to IAS Transactions were taken into consideration for the IPCC prize paper ballot. The list was done based on the reviewers' score during the transaction review process. Only the papers submitted for IAS Trans. before November 15, 2015 were included in the ballot.

The 4-members Evaluation Committee for the IPCC prize paper awards selected the top three prized papers. The Evaluation Committee members are

- o Paolo Mattavelli
- Po-Tai Cheng
- Vladimir Blasko
- Ashwin Khambadkone

The winners were recognized at the IPCC annual meeting. The prized papers are the following:

First IPCC Prize Paper Award

"Impact of DC-link voltage ripples on the machine-side performance in NPC H-bridge topology"

Authors: Jie Shen, Stefan Schröder, Jinping Gao, and Bo Qu

Second IPCC Prize Paper Award

"A DC capacitor voltage control method for active power filters using modified reference including the voltage ripple derived from a theoretical analysis"

Authors: Tomoyuki Mannen and Hideaki Fujita





Third IPCC Prize Paper Award

"Enhancement on capacitor-voltage-balancing capability of a modular multilevel cascade inverter for medium-voltage synchronous-motor drives

Authors: Yuhei Okazaki, Hitoshi Matsui, Mbugua Moses Muhoro, Makoto Hagiwara, and Hirofumi Akagi

Prof. Paolo Mattavelli presented the selection procedure for the IPCC prize papers awards 2016.

- ➤ ECCE 2016 papers must be submitted before November 15, 2016 in order to be included in the award evaluation.
- ➤ The 7-10 papers with the highest score from the first IAS Transaction review will go in final ballot.
- ➤ The Transactions Co-Chair will select an award committee with 4-5 members and each member will score each paper.
- > The score from the 4-5 members will be averaged to obtain the final list.

IAS - PELS Sponsored 2017 Conferences

The Committee was informed about upcoming events: APEC 2017, SLED 2017.

APEC 2017 will be held in Tampa - FL (USA), on March 26-30, 2017.

Dr. Giacomo Scelba presented details of SLED 2017, it will be held in Catania (Italy), on September 18-19, 2017. This edition is a tribute to the memory of Alfio Consoli.

IAS Online Tutorial Program

Patrick McCarren introduced the IAS online tutorial program. The IAS board approved the launch of this online tutorial program with the goal to extend opportunity to view beyond the classroom. The online program allows viewing on own time and it is particularly well suited for international audience. It is meant to complement and augment current conference and chapter tutorials. Active participation of Technical Committees is needed for having a successful program. The technical committees are asked to

- Propose topics and presenters
- > Help Tutorial committee during selection process
- Help Tutorial Committee identify technical reviewers
 - This is an essential step: No tutorial will be approved without reasonable assurance that reviewers will be found
 - Significant difference between live and online events
 - Online events need a technical review as IEEE, IAS, and committees' responsibility is visible
- Use and leverage the tutorial for your committee's benefits:





- Advertise
- Use same presenters for online and conference/chapter tutorials
- Use online tutorials as complement to live events

The IAS contact is Patrick McCarren, p.mccarren@ieee.org

IPCC Operating Guide

The IPCC Operating Guide has been updated from the latest version of October 1994. Pericle Zanchetta exposed and explained the amendments to the Operating Guide. Minor modifications were made to align the Committee operations to the Department Operating Guide, to better specify the scope of working area for the subcommittees and term of appointments. The guide was unanimously approved after its discussion.

IPCC Officers

Active Officers

The slate of officers of the Committee for 2017 is

- > Prof. Pericle Zanchetta as Chairman
- > Dr. Grant Pitel as Vice-Chairman
- Prof. Luca Solero as Secretary
- Dr. Bill Peterson as Past-Chair

The slate was approved by the Committee.

Special Activity Chair

The Special Activity Chair was vacant. Prof. Giovanna Oriti of the Naval Postgraduate School, Monterey CA, was nominated as new Chair. The Committee approved the appointment.

Liaison Officers

Dr. Petar Grbovic, Huawei Technologies Duesseldorf (Germany), was appointed as the new European Liaison Officer to replace Luca Solero, who became Secretary of the Committee. The Committee approved.

The Liaison Officers for 2017 are

- Prof. Toshihisa Shimizu (Japan) Asian Liaison
- Prof. Yongsug Suh (Korea) Asian Liaison
- > Dr. Petar Grbovic (Germany) European Liaison
- > Dr. Pierluigi Tenca (Germany) European Liaison





Editorial Officers

The officers for 2017 are

- Prof. Leon Tolbert as Transactions Review Chair
- Prof. Paolo Mattavelli as Transactions Review Co-Chair

Planning of ECCE 2017

November 15th, 2016 is the deadline for Tutorial proposals for ECCE 2017. Send an email to luca.solero@uniroma3.it with the details of the proposal.

Prof. Pericle Zanchetta presented information about ECCE 2017, to be held in Cincinnati OH, on October 1-5, 2017. Deadline for submission of digests is January 15, 2017.

Prof. Pericle Zanchetta requested volunteers to serve as Topic Chairs and Session Chairs for ECCE 2017. The following members volunteered to serve:

Norma Anglani, Vladimir Blasko, Fernando Briz, Jose Manuel Cano, Min Chen, Po-tai Cheng, Jorge Garcia, Pablo Garcia Fernandez, Diego Gonzalez Lamar, Petar J Grbovic, Dazhong Gu, Juan M Guerrero, Ben Guo, Dinesh Kumar, Qin Lei, Xiaonan Lu, Madhav Manjrekar, Santanu K Mishra, Vito Giuseppe Monopoli, Giovanna Oriti, Babak Parkhideh, Bill Peterson, Roberto Petrella, Rashmi Prasad, Marcello Pucci, Andrew Rockhill, Xu She, Kee Ho Shin, Adam Skorek, Yongsug Suh, Xiongfei Wang, Ruxi Wang, Yongheng Yang, Luca Zarri, Jianwu Zeng, Di Zhang, Dao Zhou.

<u>Adjourn</u>

The meeting was adjourned.

October 6th, 2016
Pericle Zanchetta Chair
Grant Pitel Vice-Chair
Luca Solero Secretary
Bill Peterson Past-chair