Technical Committee Baseline Policies & Procedures

Al-Thaddeus Avestruz
Chair, TC1: Control and Modeling of Power Electronics
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IEEE Power Electronics Society

Policies and Procedures for
TC1: Control and Modeling of Power Electronics

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IEEE Power Electronics Society Policies and Procedures for:

Modeling and Control of Power Electronics

1.0 Introduction & Scope
The Power Electronics Society (PELS) consists of Technical Committees and subcommittees that function in specific technical areas with a scope approved by the PELS Advisory Committee (AdCom). These Technical Committees are the primary mechanism through which technical activities including, but not limited to, seminars, conferences, workshops, standards, special sessions, and special issues in transactions are carried out. This document defines the policies and procedures that govern the operations for the Modeling and Control Core Technologies also known as TC1. The IEEE PELS Constitution and Bylaws each take precedence over these procedures.

*Robert's Rules of Order Newly Revised (RONR)* is the recommended guide on questions of parliamentary procedure not addressed in these procedures.

The scope of TC1 is "Research and application of modeling and control core technologies for power electronics components and systems".

2.0 Nominations & Elections

Elected & Appointed Officers (Defined)
Technical Committee (TC) Chairs report directly to the VP for Technical Operations, in accordance with the PELS Bylaws.

If a TC officer position becomes vacant before normal conclusion of his/her term, the remaining term shall be filled by special election of the TC. If such a special election is not held before or during the next regularly scheduled meeting, the VP for Technical Operations, in consultation with the President, shall appoint someone to serve the remaining term.

Positions filled shall be for completion of the interrupted term. [Revised on 9/30/19]

TC1 shall have four elected officers: Chair, Vice-chair of conferences, Vice-chair of technology, and Secretary, each of whom must be members of the IEEE Power Electronics Society or an IEEE Power Electronics Society Affiliate. Student Members are not permitted to serve as elected TC officers. It is expected that normally each TC officer will be able to attend at least two TC meetings in each year.

Three additional officers will be appointed by TC chair. The first one is Chair of Nomination and Election Committee. It is suggested that past TC chair be appointed for this position. The second officer is Standards Liaison and the third one is Publication Liaison.
The TC chair of nomination and election committee will serve two main tasks: (1) set up an ad hoc committee for the election of new TC officers, and (2) co-ordination of IEEE Fellow nomination each year from the TC.

The TC Standards Liaison will represent the TC on the Power Electronics Society Standards Committee (PELSC) and be a voting member of the PELSC.

The TC publication liaison will coordinate publications of conferences sponsored by TC1, such as COMPEL, and special issues to be published in IEEE journals, such as IEEE Transactions on Power Electronics (TPEL) and Journal of Emerging and Selected Topic on Power Electronics (JESTPE).

The nominal term for Chair, Vice-chair(s), and Secretary shall be two years. Any officer can be elected to the same position for two additional, contiguous term (i.e., continuously serve in a particular officer position for a maximum of six years). In no case, one person shall serve as a TC officer in same position for more than 8 years. The first term will start on January 1, 2015.

**Nomination & Election Procedures**

To facilitate the election of officers, TC1 will have an ad hoc Nominations & Elections Committee (N&E Committee), made up members of the TC1. The past TC chair will serve as the chair of this Nomination & Elections Committee. The chair of N & E committee will select two additional members to form a three-person committee.

The N&E Committee shall come into existence at the TC meeting first preceding the actual election and shall be dissolved after the election and installation of officers.

The purpose of the N&E Committee is to offer candidate names for officer positions. It is desirable that the N&E Committee identifies at least two candidates for each officer position.

The N&E Committee shall announce its slate of candidates at least two weeks before an election is to be held. Such announcement shall be via email (preferred) or “snail-mail.” At any point, members shall be able to submit nominations via email/snail-mail by communicating to the current Chair, Vice-chair, Secretary, or directly to the TC N&E Committee. It is desirable that such “write-in” candidates receive a number of supporting “signatures.”

During an election, actual nominations from the floor shall also be invited. All candidates, however they are identified, will have consented to being nominated and will have shown a willingness to serve, if elected. Again, it is desirable that extemporaneous, from-the-floor nominations, receive support from three or more members at the meeting.

TCs elections may be held electronically (e.g., email). Approval of this measure is by simple majority. It is necessary to register to vote and two-thirds of those registered must vote. An officer of the TC shall take responsibility for conducting the election and reporting election results to the TC membership, VP for Operations, President, and PELS administrators.
It is desirable that biographies and position statements of candidates be available to members. Candidates shall be permitted to “advertise” their candidacy on the TC email distribution list. All candidates shall be informed of election results and be permitted to appeal the outcome.

TC elections shall be administered by the TC Chair, or in his/her absence, any other elected officer.

In the case of two candidates for a position, election is by simple majority. For the case of more than two candidates, selection proceeds through a series of elections: at each stage, the individual garnering the fewest votes is eliminated, until only two remain. In the event of a tie, votes shall again be cast until the tie is broken. If that is not possible, the TC person running the election (any of the elected TC officers) shall cast a tie-breaking vote.

TC elections will normally be open. However, upon the request of any member, the election shall proceed by secret ballot. Votes will be counted by at least one officer of the TC and any other member (officer or not). A record of votes cast must be retained for post-election audit purposes.

A TC voting member shall be any individual who has: 1) “attended” (physically present, by teleconference, or via electronic means for virtual TC meetings) two or more of the prior regularly scheduled TC meetings in previous two calendar years; or 2) contributed substantially to the TC activities. (The TC Secretary shall maintain an attendance list for each such meeting. That attendance list shall be part of the Meeting Minutes prepared and issued by the Secretary. Understandably, for TCs who have not maintained attendance lists in the past, the provision cannot be instituted until two years have elapsed. In that case, any member who have attended TC meeting once will be considered as the Voting Member. A list of members shall also be maintained and appended to Meeting Minutes. In addition to the above, TC voting members must be an IEEE PELS Member, IEEE PELS Affiliate member, Sister Society member, or IEEE PELS Student Member.

TC members shall be permitted to vote electronically for a specific individual and position. (This has obvious limitations if live elections are held and the list of candidate’s changes during the course of the meeting.)

Proxy voting shall be permitted. Each person asking another to vote on her/his behalf shall inform a TC officer of this arrangement prior to the election. An actual voter shall represent no more than three proxies.

Newly elected TC officers assume their positions January 1 of the following year when they are elected.

The first electedIt is desirable that TC officers’ terms run concurrently with that of the VP for Operations. This may require transitional planning.

### 3.0 Conduction of Meetings

**Planning, Announcement & Conduction of Meetings**

Technical Committees (TCs) will normally meet three times a year, at APEC, COMPEL and ECCE. Additional meetings can be arranged if needed.
Meetings will be announced at least two weeks in advance on the committee mailing list. Meetings are open to any conference attendee.

The Committee Chair or a designated substitute, typically another TC officer, will chair meetings. Any Committee member can suggest items for the agenda.

The TC Secretary will take minutes. These minutes should be made available within one month of the meeting. Their availability is announced on the TC mailing list. Minutes are posted on the Committee website and are public.

### 4.0 Budgets & Expenses

The Vice President for Operations will inform each Technical Committee (TC) of its budget.

When a Committee feels that funds are needed to fulfill its mission, a proposal will be prepared by one or more TC Officers for discussion and approval at a Committee meeting. (Such discussion can also be carried out via the Committee’s email list.) The proposal should contain sufficient detail about the activity for which funds are sought and justification for funds being requested.

If the Committee agrees to the proposal, it will be submitted to the VP for Operations for his/her approval. If approved, funds will be used in accord with PELS procedures (refer to Section 6.7 in the PELS Bylaws regarding Financial Arrangements). The Secretary of the TC will maintain a record of expenses. Invoices are sent to the VP for Operations for approval, and then to PELS administration for payment or reimbursement.

Expenses will normally be incurred for maintaining the TCs information infrastructure (e.g., volunteer maintenance of its website) or showing appreciation for volunteer support. Recognition will not include awarding money, nor are TC funds to be used for travel purposes. See the Society Travel Policy for travel matters.

### 5.0 Major Activities

**COMPEL**

This TC organizes annual IEEE Workshop on Control and Modeling for Power Electronics (COMPEL). The details of the workshop, such as general chair, location, date, budget, will be approved by the TC meeting. In general case, the workshop is held in June of each year. The location and general chair of the COMPEL workshop will generally be approved in TC's APEC meeting two years earlier and the final budget will be approved in TC's ECCE meeting two years earlier. For example, the location and general chair of COMPEL 2016 will be approved in TC's meeting in APEC 2014 and the budget of COMPEL will be approved in TC's meeting in ECCE 2014 and then approved in PELS meetings committee meeting in ECCE 2014.

**COMPEL Best Paper Award**: COMPEL will select up to three papers presented at the conference to receive the “COMPEL Best Paper” award, without having any specific rank among them. The papers will be
selected by the award committee, to be formed by the corresponding COMPEL General Chair, Technical Program Committee Chair, and the TC1 Chair, or Vice Chair for Conferences in his absence. Any papers coauthored by the committee members will be excluded from the process and as such are not eligible for the award. [Revised on 031919]

**ICDCM**
This TC also organizes the IEEE International Conference on DC Microgrids (ICDCM). The intent is to foment work centered around the ability to generate, store, and use DC electricity, whether locally without the need for long-range transmission and distribution networks, enabling transformational changes in the power infrastructure, or in large area networks using medium voltage (MV) and high voltage (HV) dc transmission (HVDC) and distribution (MVDC) networks. The details of the conference, such as general chair, location, date, will be approved by the TC during its ECCE meeting three years earlier, and the final budget will be approved during the TC following meeting at APEC. In general, the workshop is held in May of each year. [Revised on 070119]

**Modeling and Control Technical Achievement Award**
The Modeling and Control Technical Achievement Award (Award) of the IEEE Power Electronics Society was established in 2012 to honor innovators and researchers who have made outstanding and sustained technical contributions to the advancement of power electronics in the area of modeling and control. The award is administrated by our TC and will be presented annually.

The award selection committee (award committee) for each year is composed of the following persons: (a) the award recipients of the previous two years; (b) COMPEL general chairs of the previous two years; c) TC Chair; (d) Alternate 1: volunteer previous award recipient; e) Alternate 2: Previous TC1 chair. The votes from the alternates will be counted only if there is no quorum in the following order of priority: Alternate 1 and then Alternate 2. [Revised on 101321]

The chair of the award committee is selected among the award committee members.

Nominations should be made to the chair of the award committee. The deadline for the nomination is usually March 31 of each year.

**Special Issue for JESPTE**
From time to time, TC might propose special issue for IEEE Journal of Emerging and Selected Topics in Power Electronics (JESTPE). The exact topic will be dependent on the theme of the COMPEL in each year. The TC will propose the guest editor (or guest editors) for the special issue and will support the organization and review of these special issues.

**Support of PELS Activities**
As appropriate, Technical Committees (TCs) will be active in all of PELS’s activities. This will include PELS conferences (such as ECCE, APEC, COMPEL, INTELEC) by providing representatives to their respective Technical Program Committees, by providing for professional review of submitted papers (by soliciting such assistance from among its membership) and by organizing mini-conferences, symposia, panels, short courses, tutorials, etc., as deemed appropriate by the Society and the Committee. Further, the TCs can individually organize workshops and conferences. Also, because of the broad nature of committee...
activities, collaborative sessions with other committees will be sponsored and heartily encouraged. As new technologies and application areas emerge, a TC will seek to address aspects of these topics relative to its charter, and work with both the Long Range Planning Committee.

Technical Committees will further support PELS journals, magazines, and standards activities by soliciting volunteers as authors and editors, submitting proposals, and identifying committee members from its membership. A TC will seek ways to increase active participation of its members in information exchange related to the charter of this Committee, such as: stimulating Feature Topics and Special Issues of PELS journals and magazines; and by sponsoring workshops, tutorials, short courses, panel sessions, etc. on special topics.

6.0 Information Dissemination

Each Technical Committee will maintain an Internet Web page. This Web page will be accessible from the main PELS Web page. Announcements distributed to the Technical Committee’s membership, notably meeting agendas and meeting minutes, opportunities for membership participation in Committee-sponsored activities, as well as election-related issues, will be made available on their Web page. Technical Committees will also provide at least one email exploder as an alternative for timely dissemination of information, and to welcome useful information from others.

7.0 Previous Officers

The new TC structure started in September 2009 during ECCE 2009. The following table is the list of previous TC officers. The table will be updated once any change happens. [Revised on 9/30/19, 10/13/2021]

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<thead>
<tr>
<th>Date</th>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>Sept. 2009 to Dec. 2012</td>
<td>Jian Sun</td>
<td>Chair</td>
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<tr>
<td>Sept. 2009 to Dec. 2012</td>
<td>Reagan Zane</td>
<td>Vice Chair</td>
</tr>
<tr>
<td>Sept. 2009 to Dec. 2012</td>
<td>Rolando Burgos</td>
<td>Secretary</td>
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<tr>
<td>Jan. 2013 to Dec. 2016</td>
<td>Yan-Fei Liu</td>
<td>Chair</td>
</tr>
<tr>
<td>Jan. 2013 to Dec. 2016</td>
<td>Rolando Burgos</td>
<td>Vice Chair</td>
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<tr>
<td>Jan. 2013 to Dec. 2016</td>
<td>Zhiliang Zhang</td>
<td>Secretary</td>
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<tr>
<td>Jan. 2017 to Dec. 2018</td>
<td>Rolando Burgos</td>
<td>Chair</td>
</tr>
<tr>
<td>Jan. 2017 to Dec. 2018</td>
<td>Yunwei (Ryan) Li</td>
<td>Vice Chair</td>
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<tr>
<td>Jan. 2017 to Dec. 2018</td>
<td>Chun Rim</td>
<td>Secretary</td>
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<tr>
<td>Jan. 2019 to Dec. 2020</td>
<td>Rolando Burgos</td>
<td>Chair</td>
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<tr>
<td>Jan. 2019 to Dec. 2020</td>
<td>Francisco Azcondo</td>
<td>Vice Chair of Conferences</td>
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<tr>
<td>Jan. 2019 to Dec. 2020</td>
<td>Juan Rivas</td>
<td>Vice Chair of Technology</td>
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<td>Jan. 2019 to Dec. 2020</td>
<td>Cristina Fernandez</td>
<td>Secretary</td>
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<tr>
<td>Jan. 2021 to Dec. 2022</td>
<td>Al-Thaddeus Avestruz</td>
<td>Chair</td>
</tr>
<tr>
<td>Jan. 2021 to Dec. 2022</td>
<td>Sudip Mazumder</td>
<td>Vice Chair of Conferences</td>
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