



2021



# Technical Committee 11 Policies & Procedures

Jin Wang

Chair, TC of Aerospace Power

3/5/2021

# IEEE Power Electronics Society

## Policies and Procedures for TC11: Aerospace Power

Date of Approval: March 05, 2021

---

# IEEE Power Electronics Society Policies and Procedures for:

## *TC11 Aerospace Power*

### **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 Administrative 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 Aerospace Power, also known as TC11. 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 TC11 focuses on unique challenges that are faced by power electronics components and systems for both aviation and space applications in terms of extreme operation conditions, ultra-high power density and efficiency requirements, partial discharge prevention at high altitude, radiation hardness, fault tolerance and long-term reliability, etc. The TC will host related research, education, standard and outreach activities and collaborate with other TCs and sister societies.

### **2.0 Nominations & Elections**

#### **Elected & Appointed Officers**

The Technical Committee (TC11) Chair reports directly to the VP for Technical Operations, in accordance with the PELS Bylaws.

If a TC11 officer position becomes vacant before normal conclusion of his/her term, the remaining term shall be filled by special election of TC11. 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:

This TC shall have at least four elected officers. Besides the Chair position, officer positions could include Chair, two Vice-Chairs, and Secretary, each of whom must be members of the IEEE Power Electronics Society (or affiliate member) and a voting member of TC11. Student Members are not permitted to serve as elected TC officers. It is expected that each TC11 officer will be able to attend at least two TC meeting (either in-person or virtually) in each year.

Additional officers can be appointed. The total number of elected and appointed officers shall not exceed eight (8). The suggested appointed officers are chair for Nominations and Elections (in case the past TC11 chair cannot serve the position), Liaisons for Standards, Publications, Conferences, Awards, etc. Additional ad hoc committee may also be appointed, based on the needs of TC11.

It is expected that normally the Chair of the Nomination and Election Committee will serve two main tasks: (1) set up an ad hoc committee for the election of new TC11 officers, and (2) coordination of IEEE Fellow nomination each year from the TC.

The Publication Liaison will coordinate publications of conferences sponsored by the TC, such as IEEE Energy Conversion Congress and Expo, and special issues to be published in IEEE journals, such as the IEEE Transactions on Power Electronics (TPEL) and IEEE Journal of Emerging and Selected Topic on Power Electronics (JESTPE).

The Standards Liaison will represent the TC on the IEEE Power Electronics Society Standards Committee (PELSC).

The Conference Liaison will represent the TC on the Organizing Committee (or equivalent) for any event directly sponsored (or co-sponsored) by the TC.

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). TC officers can be elected to a different officer position, but in no case shall one person continuously serve as a TC officer within TC11 for more than eight years.

### **Nomination & Election Procedures**

To facilitate the election of officers, the TC will have an ad hoc Nominations & Elections Committee (N&E Committee), made up members of the TC. The past TC chair will serve as the Chair of this Nomination & Elections Committee. Until such time as there is a past TC chair or the past TC chair cannot serve in this position, the Chair of the TC will appoint the N&E Committee Chair. The Chair of N&E committee will select two additional members to form a three-person committee. The chair of N&E Committee cannot vote during the election. The chair of N&E Committee will vote to break a tie.

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 required that the total number of candidates should be at least 50% more than the total number of positions.

The N&E Committee shall announce its slate of candidates including at least two candidates for the Chair Position and five candidates for the other three TC officer positions 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-Chairs and/or Secretary, or directly to the TC11 N&E Committee. It is desirable that such “write-in” candidates receive three or more supporting “signatures.”

During an election meeting, 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.

TC elections may be held electronically (e.g., email). In order for the election to be valid, more than half of those voting TC members must vote. The Chair of the N&E Committee shall take responsibility for

the election and reporting election results to the TC membership, VP for Technical 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 within 30 days of announcing the results by submitting such written appeal request to the TC Chair.

In the case of two or more candidates for a position, election is by simple majority. In the event of a tie, votes shall again be cast until the tie is broken. Only the candidates tied in the immediate previous election are to be included in the ballots for the tie-breaking additional elections. No additional new candidates can be added to tie-breaking elections. If the tie persists or if it is not possible to hold the additional elections for breaking the tie, the chair of N&E committee shall cast a tie-breaking vote.

TC elections will be conducted 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, if the TC has 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 meetings 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 (including affiliates), 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 not be permitted.

Newly elected TC officers assume their positions January 1 of the following year when they are elected. Positions end on December 31<sup>st</sup>. The first elected is desirable that TC officers’ terms run concurrently with that of the VP for Technical Operations. This may require transitional planning.

### **3.0 Conduction of Meetings**

#### **Planning, Announcement & Conduction of Meetings**

Technical Committees (TC) will normally meet three times a year, at APEC, EATs 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 all.

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 at which point TC members have one month to request potential corrections to such minutes. Once corrections are made the minutes will be posted on the Committee website and are public.

## **4.0 Budgets & Expenses**

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

When the TC 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 TC meeting. (Such discussion can also be carried out via the TC'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 TC agrees to the proposal, it will be submitted to the VP for Technical 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 Technical 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 or supporting TC activities. 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**

### **Description of conferences tied to TC**

TC11 will propose and coordinate conferences, workshops and seminars for aerospace and space related technologies. TC11 will collaborate with other TCs and societies to organize conferences on related topics.

### **Awards tied to this TC**

TC11 will establish one society level award and one paper award.

### **Special Issue for JESTPE**

From time to time, the TC might propose special issue for IEEE Journal of Emerging and Selected Topics in Power Electronics (JESTPE). The exact topic might be dependent on the theme of the TC conference 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, the TC will be active in all of PELS's activities. This will include PELS conferences (such as ECCE, APEC) 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 TC can individually organize workshops and conferences in addition to the TC flagship conference indicated above. 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.

The TC 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. The 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**

The 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. The Technical Committee will also provide at least one email exploder as an alternative for timely dissemination of information, and to welcome useful information from others.