



**IAS Industrial Power Conversion Systems Department
Operating Guide
APPROVED – 02/26/2023**



SECTION I - PURPOSE

A. Foreword

The Industrial Power Conversion Systems Department (IPCSD) is a Technical Department of the Industrial Applications Society (IAS) of the Institute of Electrical and Electronic Engineers (IEEE).

This Operating Guide is designed to assist the members in effectively administering the activities of this department. This document was approved by the IPCSD Department Voting Members and can be changed only with the approval of the Department Voting Members, voting as specified in Section III.

B. Scope

The Industrial Power Conversion Systems Department is responsible, within the scope of the Industry Applications Society, for the evaluation and dissemination of technical information in the field of electrical power conversion systems, including electric machines and actuators, electric drives, electro-mechanical energy conversion, electrical power converters and components, and applications such as industrial drive systems, power management systems, transportation systems, and renewable energy systems.

SECTION II – DEPARTMENT ORGANIZATION

The Industrial Power Conversion Systems Department is composed of an Operating Committee, Technical Committees, Staff Committees, Staff Positions, and Voting Members.

A. Operating Committee

1. As defined in the IAS Policy & Procedures manual, the IPCSD Operating Committee is composed of the Department Chair, Department Vice-Chair, the Immediate Past-Chair, and the chair of each of the Department Technical and Staff Committees.
2. The role and duties of the Department Chair are described in the IAS Policy & Procedures Manual. These include, but are not limited to:
 - The appointment of a chairperson for each Technical Committee, based on the recommendation of the Technical Committee.
 - The appointment of a chairperson for each Staff Committee, except for the Chair of the Nomination Committee.
 - Calling at least one yearly meeting of the Department Voting Members, with proper advance notice to Voting Department Members of the location and time of the meeting.
3. The role and duties of the Department Vice-Chair are described in the IAS Policy & Procedures Manual, under both "Vice-Chair – Technical" and "Vice-Chair – Papers".
4. The role and duties of the IPCSD Operating Committee includes:
 - Assist the Chair in the execution of his duties.

B. Technical committees

The name and scope of the Industrial Power Conversion Systems Department technical committees are defined in the IAS Policy & Procedure Manual.



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Each technical committee will develop and maintain Operating Guidelines to assist the members in effectively administering the activities of their committee. These guidelines will include a process for recommending to the Department Chair a name for Chairperson of the committee before the term of the current Chairperson expires.

Each Technical Committee must consider within its duties to regularly examine the underlying dynamics within its technical field, and accordingly suggest to the Department, or initiate, any new activity (conference, newsletter, special publication issue, webinar, tutorial program, etc) to promote the dissemination of information within its field of interest. This can include the formation or abolition of a technical sub-committee, the recommendation to form a new committee, the recommendation to modify the committee scope to include a new area of interest, or remove an area becoming obsolete.

C. Staff Committees

The Industrial Power Conversion Systems Department has the following Staff Committees: Nominations Committee, Awards Committee, Conference Development Committee, Standards Committee, and Diversity, Equity and Inclusion Committee.

1. Nominations Committee

The role of the Nominations Committee is to propose one or more names for the position of Department Vice-Chair.

The Nominating Committee is composed of the three most immediate, available Department Past Chairs, and the current Department Chair. An available individual is one who can actively participate in the activities of the committee, as determined by the Department Chair, and is willing to do so.

The Nominating Committee Chair is the most immediate, available Department Past Chair.

The Nominating Committee will select one or more names for the position of Department Vice-Chair after actively consulting with the members of the Operating Committee. The selected individuals will be preferably either out-going Technical Committee Chairs, or immediate Technical Committee Past Chairs. Some attention should be paid to ensuring proper representation, over time, of each Technical Committee in the Department Chair / Vice-Chair selection.

The Nominating Committee will prepare a motion for the appointment of the Department Vice-Chair, to be held at a meeting of the Department Voting Members, as scheduled by the Department Chair.

Names other than those mentioned in The Nominating Committee's motion for the appointment of the Department Vice-Chair can be added by petition to the Department Vice-Chair selection ballot. Such a petition must come from at least 10% or five (whichever is greater) Voting Members, and be received by the Department Chair in writing before the meeting at which the vote takes place. Names can also be added during the meeting by amending the Nominating Committee's motion, per Robert's Rules of Order.

The situation of a vacancy in the Department Chair or Department Vice-Chair position is addressed in the IAS Policy & Procedures Manual. If the case should arise of a vacancy situation not envisioned by the IAS Policy & Procedures Manual, the Nominations Committee may elect (by majority vote of its membership, present or not present at the time of the vote), a pro tempore Department Vice-Chair or Department Chair to fill that position and make provisions for permanent appointments.

In extenuating circumstances, if it is determined to be in the best interest of the Department, any officer of the Department or of its committees, that is, any Voting Member (except for the Department Chair or for members of the Nominating Committee), can be removed from their position or function, by the Department Chair, after the Chair receives the unanimous consent of the Nominating Committee. Similarly, a member of the Nominating Committee other than the Department Chair can be removed from his position on this committee by the Department Chair acting on the unanimous consent of the Nominating Committee, except for the affected individual. Finally, the Nominating Committee, acting unanimously except for the Department Chair, can petition the IAS Executive Board to remove the Department Chair from his position, according to the IAS By-Laws.

2. Awards Committee

The responsibility of the IPCSD Awards Committee, herein referred to as IPCSD-AC, is to 1) Organize and manage the IEEE IAS Industrial Power Conversion Systems Department Gerald Kliman Innovator Award (hereafter called “Kliman award”), and 2) promote the nomination of IPCSD members to any IAS or IEEE award, including senior membership, IEEE Fellow, IAS Young Member Awards, IAS Distinguished Service Award, IAS Outstanding Achievements Awards, IEEE Field and Technical awards, etc.

2.a. Awards Committee Composition

The IPCSD-AC is composed of:

- The IPCSD-AC Chair. Is appointed by the IPCSD Chair for a term of two years but can be re-appointed and can serve until a successor is appointed.
- A representative selected by each Technical Committee and approved by the IPCSD Chair.
- The most immediate, available past recipient of the Kliman Award.

2.b. Kliman Award:

The IEEE IAS Industrial Power Conversion Systems Department Gerald Kliman Innovator Award was established to honor innovators who contributed to the technical areas of this department. The award may be presented annually to an individual, for meritorious contributions to the advancement of power conversion technologies through innovations and their application to Industry. The technical field for this award includes, but is not limited to, Electrical Machines, Electrical Drives, Power Electronic Systems, Power Electronic Devices, Transportation Systems and Renewable and Sustainable Energy Conversion Systems, and their applications. This Award was established in 2005 and is named in honor of Dr. Jerry Kliman, in memory of his many contributions and innovations to these technical areas.

The Kliman award is funded by General Electric whose contribution is gratefully acknowledged.

Nominations and selection procedures for the Kliman award are defined in the document, dated June 14, 2006, entitled: “Operating Information for the IEEE IAS Industrial Power Conversion Systems Department Gerald Kliman Innovator Award”, or any approved modified version thereof.

3. Conference Development Committee

The role of the IPCSD Conference Development Committee, herein referred to as IPCSD-CDC, is to manage the portfolio of IPCSD conferences and workshops within the scope of IPCSD.

Concerning conferences currently sponsored or technically co-sponsored by IAS, the IPCSD-CDC will ensure proper participation of IAS members to these conferences, including technical participation, governance, and



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publicity and promotion.

In addition, the role of the committee is to examine the underlying dynamics in the technical fields of the Department, and suggest or take any initiatives helping the dissemination and promotion of technical knowledge within the Department scope. Such initiatives will include actions in new or evolving technical areas, or in existing fields for regions of the world currently underserved by the existing portfolio of IAS IPCSD conferences and workshops.

Such initiatives may include:

- The development and creation of a new workshops or conferences.
- Suggesting or initiating the active involvement of IAS in existing workshops or conferences currently run by other IAS or IEEE entities, societies, communities, councils, or chapters.
- Suggest or initiate the active involvement of IAS in existing workshops or conferences currently run by non-IEEE entities.
- Suggest the curtailment of IAS involvement in existing conferences and workshops, when such involvement no longer serves the interest of the Department members.
- Promote a balanced international portfolio of energy-conversion conferences, anchored by ECCE in North America, and in collaboration with ICEM (Europe), ICEMS (Asia-Pacific), and PEDES (India).
- Support the IPCSD Transportation Systems Committee in promoting and developing a balanced international portfolio of transportation-electrification conferences, based on the Global Series of ITEC Conferences.

The IPCSD-CDC is composed of:

- The IPCSD-CDC Chair. Is appointed by the IPCSD Chair for a term of two years but can be re-appointed and can serve until a successor is appointed.
- A representative selected by each Technical Committee and approved by the IPCSD Chair.

4. Standards Committee

The scope of the Industrial Power Conversion Systems Department (IPCSD) includes all matters within the scope of the industry Applications Society related to the electrical power conversion components and systems, in particular, electrical machines, drives, power converters and power electronic devices, components, and systems in industrial and commercial applications including transportation systems and renewable energy systems. The IPCSD Standards Committee shall create voluntary consensus engineering standards, recommended practices and guidelines for development, design, manufacture, application of electrical power conversion components and systems. The committee shall seek to establish industry leadership for the promotion of safe, reliable and energy efficient power conversion components and systems.

The primary role of the IPCSD Standards Committee, herein referred to as IPCSD-SDC, is to develop technical standards within the scope of activities of the technical committees of the department.

The IPCSD-SDC shall be responsible for matters relating to the following:

- a) Develop proposed IEEE standards and ensuring that they are within the scope of the Department.
- b) Identify Working group chairs within each technical committee.
- c) Initiate proposed IEEE standards within its scope, including:
 - 1) Assisting WG Chairs from each technical committee to develop Project Authorization Requests (PARs).
 - 2) Submitting a proposed PAR to the IEEE-SA Standards Board for consideration. Following approval of the PAR, the IPCSD-SDC shall work with the WGs to advance the standards through

the necessary stages to completion.

- d) Maintain the standards developed by the IPCSD-SDC.
- e) Act on other matters relating to the promotion of technical standards development within the IPCSD.
- f) Cooperate with other appropriate standards development organizations within IEEE.

IPCSD-SDC Composition

The IPCSD-SDC has membership composed of standards development subcommittee chairs of the technical committees within the IPCSD and other ex-officio members. The membership of the IPCSD-SDC comprises:

- The IPCSD-SDC Chair. Is appointed by the IPCSD Chair for a term of two years but can be re-appointed and can serve until a successor is appointed.
- A representative selected by each Technical Committee and approved by the IPCSD Chair.
- Other ex-officio members, including:
 - IPCSD Chair
 - IPCSD Vice Chair
 - IPCSD Technical Committee Chairs
 - IAS Society Standards Chair

5. Diversity, Equity and Inclusion Committee

The scope of the IPCSD Diversity, Equity and Inclusion Committee, herein referred to as IPCSD-DEIC, is to promote and enhance DEI practices within IPCSD and its technical committees. Following the IEEE DEI guidelines, this committee will ensure that IPCSD pursues its technical objectives using the “the talents and perspectives of people with different personal, cultural, and disciplinary backgrounds” [cit. IEEE DEI website <https://www.ieee.org/about/diversity-index.html>]. Following the lead of the IEEE Diversity and Inclusion committee, the IPCSD-DEIC committee will assist the IPCSD Chair “in support of IEEE’s commitment to advancing diversity in the technical profession, and to promote an inclusive and equitable culture that welcomes, engages, and rewards all who contribute to the field, without regard to race, religion, gender, disability, age, national origin, sexual orientation, gender identity, or gender expression.” [cit. <https://www.ieee.org/content/dam/ieee-org/ieee/web/org/about/nominations/nac-pd-di.pdf>].

The IPCSD-DEIC committee shall recommend actions to embed considerations of IPCSD-DEIC in every aspect of the IPCSD operations, especially as it relates to the following:

- Nomination of the department officers
- Nomination of the officers for the technical committees (TC)
- Recruiting of associate editors for the IAS-sponsored journals
- Recruiting of Vice Chairs and Topic Chairs for ECCE, APEC and other conferences
- Awards nominations and selection committees

To reach its goals, the IPCSD-DEIC will work with the other IPCSD committees and with other IEEE organizations representing minorities, such as the IEEE women in engineering (WiE) and ECCE WiE.

IPCSD-DEIC Composition

The IPCSD-DEIC includes the following members:

- IPCSD-DEIC Chair. Is appointed by the IPCSD Chair for a term of two years but can be re-appointed and can serve until a successor is appointed.
- IPCSD-DEIC Past-Chair.
- A representative selected by each Technical Committee and approved by the IPCSD Chair. That representative will also serve as DEI liaison on the TC.



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D. Staff positions

The Industrial Power Conversion Systems Department has the following Staff position: Webmaster.

The role and duty of the IPCSD Webmaster is to maintain and develop, under the guidance of the Department Chair, the Department website.

E. Voting Members

The Voting Members of the IPCSD are: The Department Chair, the Department Vice-Chair, the three immediate Department Past Chairs, the chair of each Staff Committee, and the chairs and officers of each Technical Committee. Committee officers are: the committee chair, the committee vice-chair or the two committee vice-chairs, and the committee secretary, as defined in each committee Operating Guidelines or equivalent document.

When called for a vote (or for the purpose of establishing quorum, etc), an individual holding more than one "Voting Member" position will be a single individual, and have only one vote.

SECTION III – DEPARTMENT MEETINGS AND BALLOTS

Department meetings and ballots can be conducted either in person, electronically, or in combination thereof. Meetings will be run according to Robert's Rules of Order.

Department meetings or ballots can be called by either:

- 1) The Department Chair.
- 2) The Operating Committee, acting upon a vote of a majority of its members (majority of members present or not present at the time of such vote).

The Department Chair shall call at least one meeting yearly.

A Department meeting or ballot must be announced to the Department Voting Members at least two weeks in advance, with location (if applicable), time, agenda, and nature (in person or electronic) of the meeting being defined in the announcement.

For meeting held in person: A motion will be considered as having passed if approved by a majority of Voting Members present at the time of the vote, providing there is quorum. A quorum is at least 40% of the Voting Members.

For meetings or ballots held electronically: The vote may be held over a specific period of time, of no less than one week and no more than 4 weeks, defined in the ballot or meeting announcement. This period of time allows Voting Members the opportunity to acquaint themselves with the issue to be voted on, and to cast their ballot. A motion will be considered as having passed if approved by a majority of Voting Members.

During meetings held in person, the Department Chair shall not vote, except to break a tie.

Meetings of the IPCSD are open to all members of the IAS.

Meeting agendas and minutes are expected to be publicized on the Department website.

February, 2023