

**CONSTITUTION AND BYLAWS
OF THE PULSED POWER SCIENCE AND TECHNOLOGY COMMITTEE
OF IEEE NUCLEAR AND PLASMA SCIENCES SOCIETY**

Constitution (*Amended June 2003*)

Article 1 – Name and Object

Section 1. This organization shall be known as the Pulsed Power Science and Technology Committee (PPS&T) of the IEEE Nuclear and Plasma Sciences Society (NPSS), referred to hereafter as the Committee. This standing technical committee was formed in 1994.

Section 2. The PPS&T shall strive for the advancement of pulsed power science, technology and its applications and for maintenance of high scientific and technical standards among the pulsed power community.

Section 3. The Committee shall aid in promoting cooperation and exchange of technical information among the pulsed power community. In particular, it will take responsibility for the following activities:

- a. Organize, conduct and encourage participation in the IEEE International Pulsed Power Conferences.
- b. Publish the Digest of Technical Papers of the IEEE International Pulsed Power Conferences.
- c. Recognize special achievements in the Pulsed Power Community by presentation of the IEEE NPSS Pulsed Power Conference Awards.
- d. Encourage the Pulsed Power community to publish in the Transaction of Plasma Sciences by biannually sponsoring Special Issues on Pulsed Power and by promoting publication in all monthly issues. Where appropriate we will also encourage publication in other IEEE journals.
- e. Encourage students to enter the Pulsed Power field.
- f. Cosponsor other meeting and symposium that provide an opportunity to present results of pulsed power research, development, engineering and related applications, science or technology.
- g. Represent the Pulsed Power community interests in IEEE.
- h. Act as a liaison between IEEE and other organizations in the area of pulsed power
- i. Promote IEEE and NPSS membership.

Article II-- Field of Interest

Section 1. The field of interest of the PPS&T is the understanding, development and application of pulsed power to plasma physics, nuclear science and related fields.

Section 2. The areas of technical activities shall include but not be limited to high power pulsed accelerators, pulsed power applications, pulsed forming networks, high power switching, pulsed electrical insulation and breakdown, electromagnetic energy storage, explosive pulsed power techniques, high current electron and ion diodes, intense particle beams and the associated diagnostics.

Article III--Membership

Section 1. Members of the PPS&T are representatives of the Pulsed Power Community. The Pulsed Power Community is defined as those who participate in research, development and engineering in pulsed power science, technology, applications and related scientific fields. To track the membership of this Community, it is further defined as all of the individuals on the IEEE International Pulsed Power Conference mailing list which includes, at a minimum, all individuals who have attended any of the previous three International Pulsed Power Conferences. Voting members at large shall be individuals on this mailing list that are members of IEEE/NPSS. Members of the Community are invited to join the Committee with the object to provide representation of a large cross-section of the United States of America portion of this Community and to provide excellent contacts with the International Pulsed Power Community. The Committee encourages and has strong international participation in all of its sponsored activities.

Article IV--Administration

Section 1. The PPS&T shall be composed of between twelve and twenty members that are invited to serve from the Community. The decision to invite is determined by nomination and majority vote of a quorum of PPS&T. This vote should be conducted at one of the regularly scheduled PPS&T meetings.

Section 2. (*Revised and Adopted June, 2003*) The term of office is three years with a maximum of two consecutive terms (six years). After six consecutive years of membership, a person is not eligible for re-election to PPS&T until one year after the completion of their previous terms.

Designated chairpersons of future IEEE International Pulsed Power Conferences can be voting or non-voting members of the PPS&T. It is recommended that when Conference Chairpersons are selected who are not voting members, that voting membership be offered two years before the Conference that they are chairing and that they be encouraged to serve two three year terms (six years).

Section 3. The affairs of the PPS&T shall be managed by the PPS&T Chairperson in accordance with the powers and duties as defined hereunder and in the Bylaws. In the event of the Chairpersons absence or incapacity, these duties shall be performed by the senior NPSS Pulsed Power AdCom Elected Member.

Section 4. The Chairperson is appointed annually by the President of the NPSS AdCom. At the discretion of the NPSS President, the Chairperson shall serve a two year term. With the recommendation of the PPS&T, the NPSS President may be requested to extend the term a third year. Term of office shall commence on January 1. The PPS&T shall select by majority vote a candidate for Chairperson to recommend to the President of the NPSS AdCom at the last regularly scheduled meeting near the end of each Chairperson's term.

Section 5. One or more members of the Voting Community will be elected to the serve as NPSS AdCom members representing PPS&T. NPSS is managed by AdCom. NPSS AdCom will periodically determine the number of AdCom members that will represent PPS&T. These elected AdCom members with the PPS&T Chairman will be voting members of the AdCom. They with the Chairman will represent the interests of the Pulsed Power Community and the PPS&T Committee to AdCom, NPSS and IEEE and convey IEEE and NPSS goals, policies and procedures back to the Committee and through the Committee to the Community. The person elected to this position will become a member of PPS&T if he is not a member when elected.

Section 6. The Committee shall elect a Secretary to serve for a two year term. The Secretary shall take minutes, provide copies to the members, lead discussion of the minutes in all Committee meetings and maintain a file of the minutes of past meetings. The Secretary shall incorporate amendments to the PPS&T Constitution and Bylaws, distribute copies to the PPS&T members and maintain a file of past volumes (See Article VI Section 1 and Section 2).

Section 7. The following functional committees will be formed as required to conduct important aspects of the PPS&T's business:

- a. International Pulsed Power Conference Committee (xx th IPPCC) to organize and manage particular pulsed power conferences.
- b. The xxth IEEE International Pulsed Power Conference Technical Program Committee to organize the Conference technical program and publish the technical proceedings.
- c. The Pulsed Power Conference Awards Committee to solicit nominations and make recommendations for the IEEE NPSS Pulsed Power Conference Awards.
- d. IEEE Awards and Fellowship Committee to identify and prioritize Community candidates for various IEEE and NPSS awards and for elevation to rank of IEEE Fellow and to assist in the process of competing for these awards and recognitions.
- e. Membership Committee to promote membership in IEEE and NPSS and to maintain records of the Pulsed Power Community.
- f. Publications Standards Committee to provide guidance for the publication of the Digest of Technical Papers of the IEEE International Pulsed Power Conferences and to select guest editors for the Transaction of Plasma Sciences Special Issues on Pulsed Power.

Article V-Meetings

Section 1. The PPS&T may hold meetings, conferences, symposia or conventions either alone or in cooperation with other organization subject to applicable IEEE and NPSS rules and regulations.

Section 2. Half of the PPS&T members shall constitute a quorum. Multiple offices or Committee assignments shall not entitle any member to more than one vote.

Section 3. A majority of the votes cast by those members of the PPS&T attending a Committee meeting shall be necessary for the conduct of its business except as otherwise provided in this Constitution.

Section 4. Business of the PPS&T may be handled by correspondence, telephone, facsimile, E-mail telegraph or other means of communication where, in the opinion of the Chairperson, matters requiring prompt action can be adequately handled in that manner. A majority vote of the full PPS&T is required to

take action in such a case. Telephone actions or other actions that do not involve a written record are to be promptly confirmed in writing by the Chairperson.

Section 5. The PPS&T shall meet as required to conduct business and in accordance with the Bylaws.

Article VI- Amendments

Section 1. Amendments to this Constitution may be made by a two-thirds vote of the PPS&T members. After such approval, the amendment shall be incorporated into the Constitution by the Secretary and the new version of the Constitution and Bylaws distributed to the PPS&T members. The original Constitution and Bylaws shall be Volume 1, dated September 19, 2000. The volume number and date shall be changed with each revision.

Section 2. Bylaws and amendments, thereto may be adopted by two-thirds vote of those present at a PPS&T meeting. Alternatively a Bylaw or amendment may be adopted by a two-thirds mail or e-mail vote of the members of PPS&T, provided that a fourteen day period is provided for such responses. After such approval, the amendment shall be incorporated into the Constitution by the Secretary and the new version of the Constitution and Bylaws distributed to the PPS&T members. The original Constitution and Bylaws shall be Volume 1, dated September 19, 2000. The volume number and date shall be changed with each revision.

Article VII-Revision

Section 1. The Chairperson of the PPS&T shall appoint a sub-committee at least once each five years to evaluate the effectiveness of the Constitution and Bylaws, to study the rules of governance required by the activities of the PPS&T at that time, and to propose amendments to this Constitution and Bylaws or to write a new Constitution and Bylaws appropriate to the existing and anticipated needs of the PPS&T.

Bylaws

1. PPS&T

1.1 PPS&T Committee meetings will be called and organized by the chairperson or by a majority of the members. The PPS&T shall meet at least twice a year. On odd numbered years a meeting should be held in conjunction with the IEEE International Pulsed Power Conference.

1.2 If a PPS&T member misses three consecutive meetings, the PPS&T Chairperson will contact the member and encourage participation or resignation. The PPS&T may vote to remove members.

1.3 The PPS&T shall organize committees as required to conduct its business as outlined in Article V Section 7 above and in the following:

1.3a. International Pulsed Power Conference Committee (xx th IPPCC) to organize and manage particular pulsed power conferences. The Chairperson of xx th IPPCC be the xxth Conference Chairman. He will have primary responsibility for managing and successfully implementing the xxth Conference. Candidates for Chairperson will be proposed by the PPS&T members and elected by a majority vote of PPS&T. The xxth IPPCC Chairman will select his committee members and propose a xxth IEEE International Pulsed Power Conference Technical Program Committee Chairman to be approved by the PPS&T.

1.3b. The xxth IEEE International Pulsed Power Conference Technical Program Committee to organize and implement the technical program and publish the technical digest. xxth IEEE International Pulsed Power Conference Technical Program Committee Chairman shall organize a Program Committee. This Committee will solicit abstracts for Conference papers, review abstracts, select papers, organize the Conference technical program, invite plenary speakers, manage the technical program and publish the technical proceedings.

1.3c. The Pulsed Power Conference Awards Committee to solicit nominations and make recommendations for the IEEE NPSS Pulsed Power Conference Awards-The Erwin Marx Award, The Peter Haas Pulsed Power Award, and the Outstanding Pulsed Power Student Award. The PPS&T Chairman shall appoint a Pulsed Power Conference Awards Committee Chairman. This Chairman has the responsibility of selecting an awards committee according to the IEEE approved awards criteria given below. The Awards Committee Chairman should arrange for advertising for these awards at least one year prior to the selection date. The Awards Committee members will judge each candidate according to the "Basis for Judgment" and collectively select a candidate for each award if there are eligible nominees. The Awards Committee business can be conducted in a meeting or by other method of communications as given in Article V, Section 4, that the Awards Chairman deems satisfactory to complete the judging, make a collective judgment and provide recommendations to PPS&T.

2. IEEE International Pulsed Power Conference

2.1 This Meeting is an official IEEE Nuclear and Plasma Science Society Conference that is conducted by the PPS&T NPSS Standing Technical Committee in odd numbered years. This Conference is the main forum for exchange of information in pulsed power science, engineering, technology and applications of that technology. The xx International Pulsed Power Conference Committee and the xx International Pulsed Power Conference Technical Program Committee organize and manage the conference, plan and conduct the technical program and publish the digest of technical papers for the conference. The Conference consists of both oral and poster technical sessions each day. It is the tradition of the Conference to provide time during the day and social events in the evening that encourage interactions between attendees. The Conference is traditionally held in the United States with strong participation for a large

number of countries. Attempts should be made to involve members of the international pulsed power community in the conference planning and organizing. Support is solicited from organizations employing and supporting members of the pulsed power community through out the world.

2.2 The digest of technical papers of each conference is made available to the attendees of the Conference, members of the community who purchase a copy during the Conference and to the IEEE Book Broker Program. These digests are distributed to libraries and other regular customers of IEEE Book Broker Program and are available to the general scientific and engineering community through IEEE Book Broker Program.

2.3 The Chairpersons of the xx IEEE International Pulsed Power Conference Committee and the xx IEEE International Pulsed Power Conference Technical Program Committee present their plans for the xx Conference to PPS&T for review and approval. The budget for each conference is presented to PPS&T for preliminary approval and to the NPSS President and Treasure for final approval. The budget must follow IEEE and NPSS guidelines and be presented in the IEEE format.

3. Awards (*Revised and Adopted 26 February 2004*)

3.1 The IEEE TAB has approved three NPSS Conference Awards for the PPS&T to administer. Each of these awards will be presented at the pulsed power conferences if a suitable recipient is identified for each award. These awards are the Erwin Marx Award, the Peter Haas Pulsed Power Award and the Outstanding Pulsed Power Student Award. To change an award or an award criteria, PPS&T must petition NPSS AdCom and IEEE TAB. During the adoption process for this Constitution and Bylaws, the PPS&T approved minor changes in criteria for selecting Awards Committee members and for the presentation by the Peter Haas Award recipients. The IEEE TAB approved criteria for each award including these minor changes by PPS&T follows:

3.2. Erwin Marx Award

a. Description

To recognize outstanding technical achievements in pulsed power engineering, science and technology by an individual over an extended period of time.

b. Administration:

Nuclear and Plasma Science Society

c. Eligibility:

Individuals who have made outstanding technical contributions to pulsed power technology for at least ten years.

d. Prize

\$2000 and a plaque

e. Basis for Judgment:

1. Importance of the individuals technical contributions to pulsed power research, development or engineering. (50 points)
2. Importance of technical contributions made by teams led by the candidate (20 points)
3. Quality and significance of publications and patents (20 points)
4. Technical distinction over and extended period of time (10 points)

The Award is in consideration for outstanding technical accomplishments. The nominee is not required to be a member of the NPSS or IEEE but, where candidates have otherwise equal qualifications, preference shall be given to the candidate who is a member of the IEEE.

f. Funding

Provided by the NPSS IEEE International Pulsed Power Conference budget.

g. Nominee Solicitation:

Nominations will be requested in the NPSS Newsletters and in each Pulsed Power Conference announcement. The first announcement is one year before the biennial award presentation. Members of the NPSS Standing Technical Committee on Pulsed Power Science and Technology will encourage nominations.

h. Awards Committee:

An Awards Committee Chairman will be appointed by the Chairman of the NPSS Standing Technical Committee on Pulsed Power Science and Technology at or before the first PPS&T meeting following each Pulsed Power Conference. The Awards Committee Chairman will be a previous recipient of either the Erwin Marx Award or the Peter Haas Pulsed Power Award and be a member or former member of the NPSS Standing Technical Committee on Pulsed Power Science and Technology. The Awards Committee Chairman will guide the selection process for the Erwin Marx Award to be considered for that biennial period. The Awards Committee Chairman will select a committee of at least eight members from previous recipients of either the Erwin Marx Award or the Peter Haas Pulsed Power Award. The Awards Committee membership will be approved by the Chairman of the NPSS Standing Technical Committee on Pulsed Power Science and Technology.

The Chairman of the Awards Committee will ensure that the publicity for the Award is completed in a timely fashion. The announcement for the Award will identify the Awards Committee Chairman and request that nominations be mailed directly to the Awards Committee Chairman. The Chairman will collate the nomination material, prepare a rating sheet for the committee members to use in judging the nominees, and mail the material with instructions to all Awards Committee members. Opportunities will be provided for the Awards Committee members to discuss the selection process and answer questions about the nominees either in a Committee meeting or by phone or email conference.

Each Awards Committee member will judge whether nominees meet the qualifications, rate each qualified nominee and provide the judging and rating information to the Awards Committee Chairman. The Chairman will tabulate the ratings and the qualified nominees that have the highest point total will be finalists for the award. The Awards Committee Chairman will notify the Awards Committee members of the results of the voting and request comment. Discussion and voting will continue until at least a two thirds majority of the Committee agrees on the recipient of the Award. The Awards Committee Chairman

will notify the Chairman of Pulsed Power Science and Technology Committee of the results of the Awards Committee process including a motion that the Award be presented to the selected candidate. If a qualified candidate is not selected, the award will not be presented for that biennial period. The Pulsed Power Science and Technology Committee Chairman will secure a vote from the members of the Pulsed Power Science and Technology Committee on the motion either in one of the meetings of the PPS&T Committee or by phone or mail vote. If the Pulsed Power Science and Technology Committee approve the motion the Award will be presented at the next IEEE International Pulsed Power Conference. If they do not approve the motion for a given award, the award will not be presented for that biennial period.

i. Presentation:

The biennial award will be presented in odd numbered years at the IEEE International Pulsed Power Conference Awards Banquet.

j. Publicity:

The presentation of the award will be featured in the NPSS Newsletter. The recipient will be a featured speaker at the Pulsed Power Conference. A picture of the recipient and an article describing the recipient's accomplishments will be in the forward of the Digest of Technical Papers of the Pulsed Power Conference in which the award was received.

3.3. Peter Haas Pulsed Power Award

a. Description:

Individuals whose efforts, over an extended period of time resulted in important ~~the~~ pulsed power programs and the growth of important areas of activity including research, education, applications and information exchange. This biennial award will be presented in odd numbered years.

b. Administration:

Nuclear and Plasma Science Society

c. Prize:

\$2000 and a plaque.

d. Eligibility:

Any individual who has demonstrated sustained contributions to developing, managing or influencing programs, education or information exchange that has lead to important advances in the field of pulsed power.

e. Basis for Judgment:

1. Importance of contributions to Pulsed Power through developing, managing or influencing programs, education, or information exchange. (40 points)
2. Demonstrated leadership and service to the field of pulsed power. (30 points)

3. Importance of the technical program contributions to pulsed power research or development. (20 points).
4. Technical distinction in advancing or enlarging the field of pulsed power over and extended period of time (10 points)

The Award will consider the total benefit conferred on pulsed power by the individual. The nominee is not required to be a member of the NPSS or IEEE but, where candidates have otherwise equal qualifications, preference shall be given to the candidate who is a member of the IEEE.

f. Funding

Provided by the NPSS Pulsed Power Conference budget.

g. Nominee Solicitation:

Nominations will be requested in the NPSS Newsletter and in each IEEE International Pulsed Power Conference announcement. The first announcement is about one year prior to the award presentation. Members of the NPSS Standing Technical Committee on Pulsed Power Science and Technology will encourage nominations

h. Awards Committee:

An Awards Committee Chairman will be appointed by the Chairman of the NPSS Standing Technical Committee on Pulsed Power Science and Technology at or before the first PPS&T meeting following each Pulsed Power Conference. The Awards Committee Chairman will be a previous recipient of either the Erwin Marx Award or the Peter Haas Pulsed Power Award and be a member or former member of the NPSS Standing Technical Committee on Pulsed Power Science and Technology. The Awards Committee Chairman will guide the selection process for the Peter Haas Pulsed Power Award to be considered for that biennial period. The Awards Committee Chairman will select a committee of at least eight members from previous recipients of either the Erwin Marx Award or the Peter Haas Pulsed Power Award. The Awards Committee membership will be approved by the Chairman of the NPSS Standing Technical Committee on Pulsed Power Science and Technology.

The Chairman of the Awards Committee will ensure that the publicity for the Awards is completed in a timely fashion. The announcement for the Awards will identify the Awards Committee Chairman and request that nominations be mailed directly to the Awards Committee Chairman. The Chairman will collate the nomination material, prepare a rating sheet for the committee members to use in judging the nominees, and mail the material with instructions to all Awards Committee members. Opportunities will be provided for the Awards Committee members to discuss the selection process and answer questions about the nominees either in a Committee meeting or by phone or email conference.

Each Awards Committee member will judge whether nominees meet the qualifications, rate each qualified nominee and provide the judging and rating information to the Awards Committee Chairman. The Chairman will tabulate the ratings and the qualified nominees with the highest point totals will be finalists for the award. The Awards Committee Chairman will notify the Awards Committee members of the results of the voting and request comment. Discussion and voting will continue until at least a two thirds majority of the Committee agrees on the recipient of the Award. The Awards Committee Chairman will

notify the Chairman of Pulsed Power Science and Technology Committee of the results of the Awards Committee process including a motion that the Award be presented to the selected candidate. If a qualified candidate is not nominated, the award will not be presented for that biennial period. The Pulsed Power Science and Technology Committee Chairman will secure a vote from members of the Pulsed Power Science and Technology Committee on these motions either in one of the semiannual meetings of the Committee or by phone or mail vote. If the Pulsed Power Science and Technology Committee approve the motion the Award will be presented at the next IEEE International Pulsed Power Conference. If they do not approve the motion for a given award, the award will not be presented for that biennial period.

i. Presentation:

Presented in odd numbered years at the IEEE International Pulsed Power Conference.

j. Publicity:

The presentation of the award will be featured in the NPSS Newsletter. The recipient will be ~~the~~ a featured speaker at the IEEE International Pulsed Power Conference. A picture of the recipient with an article describing the recipients accomplishments will be in the forward of the Digest of Technical Papers of the Pulsed Power Conference in which the award was received.

3.4 Outstanding Pulsed Power Student Award

a. Description

To recognize outstanding contributions as a student in pulsed power engineering, science or technology. Candidates for this Award will be solicited annually and the selection process will be completed each year. Awards will be presented at the next IEEE International Pulsed Power Conference.

b. Administration:

Nuclear and Plasma Science Society

c. Prize

\$1000 and certificate.

d. Eligibility

Any full time undergraduate or graduate university student in pulsed power engineering or science. The nominee must be a student when nominated.

e. Basis for Judgment:

1. Quality of research contributions (40 points)
2. Quality of educational accomplishments (30 points)
3. Quality and significance of publications and patents (30 points)

f. Funding

Provided by the NPSS Pulsed Power Conference budget.

g. Nominee Solicitation:

Nominations will be requested in the NPSS Newsletter and by solicitation using the IEEE International Pulsed Power Conference mailing list. The first solicitation will be at least four months prior to the date for completing the selection process for that year. Members of the NPSS Standing Technical Committee on Pulsed Power Science and Technology will encourage nominations.

h. Awards Committee:

An Awards Committee Chairman will be appointed by the Chairman of the NPSS Standing Technical Committee on Pulsed Power Science and Technology at or before the first PPS&T meeting following each Pulsed Power Conference. The Awards Committee Chairman will be a previous recipient of either the Erwin Marx Award or the Peter Haas Pulsed Power Award and be a member or former member of the NPSS Standing Technical Committee on Pulsed Power Science and Technology. The Awards Committee Chairman will guide the selection process for the Peter Haas Pulsed Power Award to be considered for that biennial period. The Awards Committee Chairman will select a committee of at least eight members from previous recipients of either the Erwin Marx Award or the Peter Haas Pulsed Power Award. The Awards Committee membership will be approved by the Chairman of the NPSS Standing Technical Committee on Pulsed Power Science and Technology.

The Chairman of the Awards Committee will ensure that the publicity for the Awards is completed in a timely fashion. The announcement for the Awards will identify the Awards Committee Chairman and request that nominations be mailed directly to the Awards Committee Chairman. The Chairman will collate the nomination material, prepare a rating sheet for the committee members to use in judging the nominees, and mail the material with instructions to all Awards Committee members. Opportunities will be provided for the Awards Committee members to discuss the selection process and answer questions about the nominees either in a Committee meeting or by phone or email conference.

Each Awards Committee member will judge whether nominees meet the qualifications, rate each qualified nominee and provide the judging and rating information to the Awards Committee Chairman. The Chairman will tabulate the ratings and the qualified nominees with the highest point totals will be finalists for the award. The Awards Committee Chairman will notify the Awards Committee members of the results of the voting and request comment. Discussion and voting will continue until at least a two thirds majority of the Committee agrees on the recipient of the Award. The Awards Committee Chairman will notify the Chairman of Pulsed Power Science and Technology Committee of the results of the Awards Committee process including a motion that the Award be presented to the selected candidate. If a qualified candidate is not selected, the award will not be presented for that biennial period. The Pulsed Power Science and Technology Committee Chairman will secure a vote from members of the Pulsed Power Science and Technology Committee on these motions either in one of the semiannual meetings of the Committee or by phone or mail vote. If the Pulsed Power Science and Technology Committee approve the motion the Award will be presented at the next IEEE International Pulsed Power Conference. If they do not approve the motion for a given award, the award will not be presented for that year.

i. Presentation:

Presented in odd numbered years at the IEEE International Pulsed Power Conference.

j. Publicity:

Kenneth R. Prestwich
Comment:

Kenneth R. Prestwich
Comment:

The presentation of the award will be featured in the NPSS Newsletter. The Award presentation will be described in the forward of the Digest of Technical Papers of the Pulsed Power Conference in which he received the award.