



AMERICAN INSTITUTE *of* ELECTRICAL ENGINEERS

(HEADQUARTERS: 345 EAST FORTY-SEVENTH STREET, NEW YORK 17, N. Y.)

PROFESSIONAL DEVELOPMENT AND RECOGNITION DEPARTMENT

Address Reply to

A.L. Landres
Headquarters

July 23, 1962

Mr. W. H. Chase, President
American Institute of Electrical Engineers
Ohio Bell Telephone Company
750 Huron Street
Cleveland, Ohio

Dear Mr. Chase:

Mr. Skrotzki has asked me to forward seven copies of the Report of the Special Committee of the Board of Examiners relating to membership recommendations to you, to be reviewed for the new IEEE. The Department at its meeting in June voted that this report be referred to Mr. Skrotzki for his use in negotiating with IRE at the proper time, and it is being referred to you for submission to the 7-man committee representing the AIEE on the 14-man committee, and for further instructions to Mr. Skrotzki.

I have also attached a copy of the letter ballot which is being mailed to the department members today. Mr. Skrotzki will inform you of the results as soon as the required number of replies are received.

Very truly yours,

A. L. Landres
Secretary, PDR Dept.

att:

cc: Messrs. N.S. Hibshman ✓
B.G.A. Skrotzki

8.44.400

COMMENTS
OF
SPECIAL COMMITTEE OF BOARD OF EXAMINERS AIEE
ON THOSE ASPECTS RELATING TO MEMBERSHIP OF THE
DRAFT OF PROPOSED CONSTITUTION AND BY-LAWS
FOR THE
SOCIETY OF ELECTRICAL AND RADIO ENGINEERS
INCORPORATED
REVISION #1
JANUARY 2, 1962

Reference numbers at the left margin refer to the similarly numbered sections of the proposed Constitution and By-Laws. Comments are enclosed in parentheses or otherwise clearly labelled. Proposed revised text is not enclosed by parentheses and is marked in places where it might be confused with comments.

Constitution

11. By-Laws

(Either in this Section, or in Section 408.3, a provision should be made for the date on which By-Laws become effective.)

12. Membership

(Provision should be made by direct statement in this section, or in the By-Laws, for retention in the merged Society by present members of the two societies, of the equivalent of former rights and grades of membership held in the original societies. Under the proposed By-Law 307.3, for example, an AIEE "Member for Life" under 65 years of age would be forced to resume payment of dues, and under By-Law 301g he would lose the "Member for Life" status he now has.)

By-Laws

303 - Qualifications

(1) Honorary Members

(Experience indicates that in order to protect this "super" grade from deterioration, proposals for election of Honorary Members should come from a special "Honors Advisory Committee" - See AIEE By-Laws 80.060C-3.)

(2) Fellow

The grade of Fellow is one of unusual professional distinction and shall be conferred only by invitation of the Board of Directors upon a person of outstanding and extraordinary qualifications and experience in the fields of electrical engineering, allied branches of engineering or the related arts and sciences.

Distinction comprises those career items which differentiate a nominee from contemporaries who may nevertheless have served as long and have been advanced to comparable status in the profession of engineering.

The career factors that make for such eminence and distinction are those arising from more than usual engineering accomplishment in research, inventions, patents, significant innovations, design, operation, manufacturing, directive supervision, literature, public service and teaching. Receipt of honors is recognized as confirming such contributions.

Election to the grade of Fellow shall be from those Members whose distinction is brought to the attention of the Board of Directors by five or more Fellows or Senior Members who submit data that in the opinion of the Board on Fellows is sufficient to substantiate the importance of the accomplishment and warrant the issuance of a citation and conferring of the honor.

Transfer to Fellow Grade may not be made by application.

When proposing a candidate for Fellow Grade, sponsors shall, except as specified later, give reference to five (5) Fellows. Qualified Fellow sponsors may act as references.

Should the sponsors establish in advance to the Board on Fellows that the candidate is not personally known to five (5)

(2) Fellow (Continued)

Fellows who are sufficiently familiar with the candidate's experience and professional reputation to justify the use of their names as references, the Board on Fellows may accept at its sole discretion, for the deficiency of Fellow references, Senior Members of the Society, or non-members who are engineers or scientists of standing in the profession.

A Fellow at the time of election shall have been in good standing in the Senior Member Grade for at least 7 years immediately prior to the date of proposal to election to Fellow.

A person who, at the time of admission to the Grade of Senior Member, held in good standing in a cognate electrical engineering society of national scope in any country, a grade of membership for which the qualifications indicate a standing equivalent to the grade of Senior Member herein, may have such years of prior Membership in that equivalent grade to a maximum of 5, considered as a part of the requisite 7 years in Senior Member Grade.

Comments on preceding text

The Board of Examiners believes that inasmuch as the word electrical engineering is generic, it is redundant to include "radio" and "electronics" in the requirements. It will not object, however, to the inclusion of these words if the Board of Directors wishes.

The remainder of the suggested revision is a compromise, eliminating some AIEE requirements, while retaining others. The seven years Senior Member requirement is definitely a compromise in years with IRE's "in any grade." The Board of Examiners has always felt that if a member has sufficient distinction to warrant election to Fellow Grade, that he should not only be qualified for

Comments on preceding text (Continued)

Senior Member Grade, but that he should have had sufficient interest in the Society to have received that grade, and should have served in the grade for the specified years.

The Board of Examiners does not believe that the Board of Directors of the merged societies acting under the proposed Constitution and By-Laws would want to suffer the pressures which having the power to waive the 7 year requirement would bring upon it.

In a new organization of over 125,000 members the Board of Examiners believes that the consideration and election of Fellows should be a process continuing throughout the year. This makes it possible to ask sponsors for additional information, and to give reconsideration at least once, to proposals for advancement to Fellow Grade.

The Board of Examiners does not believe that there should be a limit or quota on the number of Fellow elections in a given year.

For the last several years the work of the Board of Examiners of AIEE has increased to such a degree that there is difficulty in completing it in eleven yearly meetings. It, therefore, subscribes to the proposal that there be two Boards.

(a) Board on Fellows

This Board shall consider proposals for Fellow Grade.

(b) Board on Admissions and Advancement

This Board shall consider or supervise consideration of all applications for admission and advancement.

(c) The Chairman of the Board on Admissions and Advancement shall be an ex-officio member of the Board on Fellows.

Suggested Revision of Text

- (3) Senior Member is the highest professional grade for which application may be made and shall require experience and attainment reflecting professional maturity. For admission or transfer to the grade of Senior Member, an applicant shall qualify under one or more categories in the field of electrical engineering, allied branches of engineering, or the related arts and sciences.
- (a) Engineer who has attained proficiency in important design, construction, operation, manufacturing, research or development.
 - (b) Educator who has attained proficiency in the teaching of a major course in an electrical engineering or science curriculum in an Institution accredited by a Regional Accrediting Agency or approved by the Board of Directors.
 - (c) Originator who has attained proficiency by reasons of inventions or original work in electrical engineering, science, arts or literature.
 - (d) Executive who has attained proficiency as an executive of electrical engineering or allied work of large scope, or by the application of electricity to important engineering or technical projects.
 - (e) Scientist who has achieved proficiency in the profession.
 - (f) Other: Persons who have attained proficiency through achievements equivalent to those of "a" to "e" in such areas as technical writing or editing, patent prosecution or patent law, provided these achievements serve to advance progress substantially in the fields of electrical engineering, allied branches of engineering, or the related arts and sciences.

Suggested Revision of Text (Continued)

At the time of admission or advancement to the Grade of Senior Member, the applicant shall have been in the active practice of his profession for at least ten (10) years in one or a combination of several branches of the electrical field indicative of growth in competency and achievement in that field and of a character satisfactory to the Board on Admissions and Advancement. He shall have had responsible charge of important work for at least two years.

Graduation from an engineering or science curriculum approved by the Board of Directors may constitute three (3) years of this requisite 10 years of practice. Graduation from an engineering or science curriculum not approved by the Board of Directors may be given such credit as is delineated hereinafter in these By-Laws.

A person who holds in good standing in a cognate engineering society of national scope in any country a grade of Membership for which the qualifications indicate a standing equivalent to Senior Member therein, shall have such Membership considered as fulfilling the requirements for Senior Member Grade.

- (4) Member is a professional grade limited to those who have demonstrated competence to undertake professional work, under direction, in the fields of electrical engineering, allied branches of engineering or the related arts and sciences.

For admission or transfer to the Grade of Member a candidate shall qualify in one of the following categories in the fields of electrical engineering, allied branches of engineering or the related arts or sciences:

Suggested Revision of Text (Continued)

- (a) Engineer who is qualified under instruction and supervision to undertake electrical design, construction, operation, manufacture, research or development, and who shall have had at least three years of professional experience.
- (b) Educator who is qualified under supervision to teach electrical subjects in an Institution accredited by a Regional Accrediting Agency or approved by the Board of Directors, who shall hold the rank of Instructor or Higher, and who shall have had at least three years of professional experience.
- (c) Scientist who is qualified under instruction and supervision to undertake research, development, design, construction, operation or instruction, and who shall have had at least three years of professional experience.
- (d) Executive, who, for at least six years has had under his direction important technical engineering or research work. Graduation from an engineering or science curriculum approved by the Board of Directors will be considered the equivalent of three years of the requisite experience; graduation from an engineering or scientific curriculum not approved by the Board of Directors may be given such credit as is delineated hereinafter in these By-Laws.

At the time of admission to the Grade of Member the applicant shall be at least 21 years of age, and shall be of a character satisfactory to the Board on Admissions and Advancement.

- (5) Associate is a grade for an applicant who cannot qualify for

Suggested Revision of Text (Continued)

Member or Senior Member grades but who can satisfy the Society that he is interested in and capable of rendering service to electrical engineering or electrical science in the fields of electrical engineering, allied branches of engineering, the related arts or sciences, commerce, industry, law, medicine, journalism or arts, and that his work is so related to applications of electricity that his admission to Associate Grade will contribute to the welfare of the Society.

- (6) Student is a grade to which admission is by application from among students enrolled and devoting 30% of full time as a registered undergraduate or graduate student, in a regular course of study in electrical engineering, an allied branch of engineering or the related arts and sciences.

Upon graduation the "Student" becomes eligible to either the Member Grade or the Associate Grade, depending upon his educational status.

- (a) Full credit for education toward admission or advancement to a higher grade can be given by the Board on Admissions and Advancement when the applicant meets the By-Law requirement that he shall be a graduate of a curriculum of at least 4 years duration in electrical engineering, an allied branch of engineering, or in the related arts and sciences, accredited by a Regional Accrediting Agency or approved by the Board of Directors. Except in a few cases the machinery has not been found whereby full credit can be given for education outside of the United States, even though it is recognized that a great number of these schools have curricula fully equivalent

Suggested Revision of Text (Continued)

to those accredited in the United States. Three (3) years credit shall be considered maximum credit for undergraduate education toward experience requirements of By-Laws 303(3) and 303(4) for admission to or advancement to Member or Senior Member Grade.

(b) Partial credit for education toward admission or advancement to Member Grade may be given by the Board on Admissions and Advancement to an applicant:

- (1) Who has been a student in a curriculum of at least 4 years duration in electrical engineering, allied branches of engineering or the related arts or sciences accredited by a Regional Accrediting Agency or approved by the Board of Directors, on the basis of six months professional experience for each full year of work satisfactorily completed in that curriculum, or
- (2) Who has graduated from a course of study of at least two years duration in electrical engineering, allied branches of engineering or the related arts or sciences, in an educational institution not recognized under By-Law 303-6a, but specially approved by the Board of Directors, on the basis of one year's professional experience for such graduation.
- (3) To obtain partial credit for education toward Member Grade under this By-Law, the applicant also shall meet at least one of the following requirements.
 - (a) He shall be engaged in professional engineering or scientific work. Appointment of an applicant

Suggested Revision of Text (Continued)

to an advanced engineering training program (specifically excluding conventional indoctrination programs) may, at the discretion of the Board on Admissions and Advancement, be considered as being engaged in professional engineering or scientific work, or

- (b) He has had a technical paper accepted for publication in the publications of the Society or a paper of equivalent technical caliber published elsewhere, or
- (c) He has made an invention in the electrical field and supplies the Board on Admissions and Advancement satisfactory evidence that he is considered in his organization the inventor thereof, or
- (d) He has received an Engineer in Training Certificate, based on examination, or a Professional Engineering License from a State Registration Board whose requirements are accepted by the Board of Directors.

- (c) Credit for graduate work against experience may be allowed toward Member or Senior Member Grades in addition to that allowed for undergraduate work, where the applicant has received an advanced degree from an educational institution accredited by a Regional Accrediting Agency or approved by the Board of Directors. The credit may be only one of the following:

- (1) One (1) year for a Master's Degree or
- (2) Three (3) years for a Doctor's Degree

Suggested Revision of Text (Continued)

where such graduate work is in engineering or science closely related to engineering, provided such credits do not give duplicate credit for time that is submitted as part of the specified experience time.

An advanced degree for graduate work in engineering or science from an educational institution having pertinent curricula approved by the Institute shall be considered the equivalent of graduation from an approved undergraduate curriculum, without respect to the curricula of the institution at which the undergraduate training was received.

- (d) The Board on Admissions and Advancement, by a majority vote of those present at a regular meeting may recommend to the Board of Directors for admission into the Society as Members, applicants in the electrical scientific field who are graduates of a recognized Institution of Higher Learning granting 4 year Bachelor Degrees, and whose contributions to the Electrical Field make membership in the Society desirable.

This regulation shall be construed as specifically pertinent in the case of Doctors of Medicine (MDs) and scientists in the medical field whose major collegiate work may not have been in the science of engineering, physics, chemistry, mathematics or the related arts.

Applicants so recommended shall be specially identified in the list of approved applicants submitted to the Board of Directors.

Comments The Board of Examiners notes that AIEE, within the last several years, eliminated the dual student grades and does not think that we should return to that.

304 - Applications

1. Delete "by the General Manager."

Change "Board of Examiners" to "Board on Admissions and Advancement."

2. Insert after "For Student . . ." Suggested Revised Text

Applications for admission or transfer are acted upon by the Board on Admissions and Advancement after replies are received from references. In the event of failure to receive replies from the required number of references as indicated above, or if more information is required, the applicant may be called upon for additional references or information. The Board on Admissions and Advancement shall be the judge of the adequacy of the reference and the information.

Comments

3. Eliminate this section. The first sentence is redundant. The second sentence is impractical and the modus operandi should be placed in the Code of Practice of the Board on Admissions and Advancement.
5. Eliminate "and Fellow." Eliminate "and may waive grade."
6. Student Admissions Suggested Revised Text

The duration of Student Membership is contingent upon the following:

- (a) If the fiscal year ends within 6 months or less after the date of graduation, Student Membership may be continued for one (1) additional fiscal year.

304 - Applications (Continued)

- (b) Where the age of 21 has not been reached on or prior to the date of graduation, Student Membership can be renewed to the end of that fiscal year in which this age is attained.
 - (c) In no case shall Student Membership extend beyond a period of 7 years.
 - 7. Merit - The Board on Admissions and Advancement considers applications solely upon their merits, as demonstrated by the written record.
 - 8. Other Grades - An applicant for admission to the Society who in the judgement of the Board on Admissions and Advancement is not eligible for the grade applied for, may be so notified and be given the opportunity of changing his application accordingly.
 - 9. Objection by members of the Society to the admission or transfer of any candidate to any grade must be accompanied by reasons for such objection. All such statements are treated as confidential.
 - 10. Refusals - Admission or advancement may be refused any applicant whose character, reputation or professional conduct may make him an undesirable member.
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Comments

305 - Proposals

- 1. Delete entire section numbered 305.

307 - Dues

- 3. A "Save Clause" should be added so that existing "Members for Life" of AIEE not yet 65 will not have to resume payment of dues.

405 - Committees

2. Add: Board on Fellows

Board on Admissions and Advancement

Delete: Fellow Committee and Board of Examiners

For Committees appointed by Board of Directors:

Delete: Fellow

Add: Board on Fellows

Suggested Revised Text

7. The Board on Admissions and Advancement shall be responsible for advising the Board of Directors as to the admission and transfer of applicants to the professional grades of Senior Member and Member.

It shall be concerned with determining whether the applicants meet the requirements of the Constitution and the By-Laws, functioning primarily as a jury and acting as a guardian of the membership standards and requirements of the Society. It shall hold monthly meetings in each month of the year except August in the interest of expediting the processing of applications.

Membership shall be a minimum of 20 members of Fellow or Senior Member Grade. As far as is possible, at least one half of the Board shall be reappointed each year.

Applications for the grades of Associate and Student shall be handled by the Society Headquarters staff under the general direction of the Board on Admissions and Advancement which shall submit periodic reports to the Board of Directors.

10. The Board on Fellows shall be responsible for making recommendations to the Board of Directors for nominees to be elevated to

Suggested Revised Text (Continued)

the grade of Fellow. The Board shall provide a citation for each such nominee.

Comments Delete: The remainder of this paragraph. The Board of Examiners does not consider it desirable to limit the number of Fellows elevated in a given year. IRE elevates about 75, AIEE about 90 per year. AIEE's nominations are on the increase. "Sources . . . etc." is not required in the By-Laws.

Suggested Revised Text

The Board on Fellows shall consist of not less than 30 members chosen from those of Fellow Grade, including at least one Fellow from each Region.

Meetings shall be held on alternate months commencing in January of each year. Fellow proposals shall each be presented to the Board assembled, and approval shall require a $3/4$ affirmative vote of those present. Ten Fellows shall constitute a quorum for this Board.