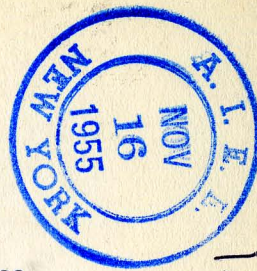


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November 14, 1955

Mr. Nelson S. Hibshman
Secretary, AIEE
33 West 39th Street
New York 18, New York

Dear Nelson:

Last week you and I had a long discussion on how AIEE should conduct itself in its joint affairs with related societies. We seemed to be in surprising agreement on many items; in equally surprising disagreement on others. Each of us, perhaps correctly, blamed the other for a certain amount of inconsistency and each of us promised the other at the first opportunity to set down on paper an unbiased review of the principles involved and the practices that might develop. The long week end has given me this opportunity.

The Present Situation: You and I at this moment occupy the position of leadership in the largest and, we hope, most successful engineering society in the world. AIEE's membership on many occasions has expressed itself as being primarily interested in the development of the art, secondarily in the progress of the profession. We seem to be doing very well in the purely technical field with rather wide and complete coverage; joint technical work is carried on with other societies as a matter of course. Joint activities in the professional field, or joint administration activities, still leave something to be desired in that there is no common opinion among members of the engineering profession as to how "unity" may be achieved. One "unity" body, ECPD, is functioning well in its old traditional paths. EJC, a new unity body, is perhaps suffering from growing pains; right or wrong, many AIEE members seem to want to change it, improve it, or study it further. Many AIEE members seem to

feel that professional activities could best be handled by NSPE, either as a separate or as an affiliated group. NSPE has AIEE approval on the possibility of its becoming a constituent society of ECPD; it has turned down an invitation to join EJC. IRE also has turned down an invitation to join EJC. While it has very large joint operations with AIEE in the student branch and technical fields, its administration seems to be opposed to joint responsibilities with anyone else. It is entirely within the realms of possibility, however, that IRE may apply for both Councils. In spite of the fact that the extension of IRE's interest to the "electronic" as well as the radio field places it astride of most AIEE activities, no organic union is anticipated. It is obviously very difficult, in this field of intersociety relationships, to maintain consistency in presenting AIEE's aims and attitudes and to help the profession as a whole while still retaining a correct jealousy concerning AIEE's present power, prestige, and position. The statement of certain obvious principles should help.

Principles:

1. The first duty of any citizen is to his community (country, continent, civilization, culture, etc., etc.).
2. His next duty (if he's an engineer) is to his profession.
3. His next duty (if he's an E.E.) is to the electrical engineering profession.
4. His next duty is to AIEE.

It would seem then that, if an AIEE member worked single-mindedly for the good of the Institute, he would not be far wrong, provided that he always served the best interests of his higher obligations.

It is not clear, however, how these simple things affect the problem of "unity." Would unity of the profession affect the community favorably? It may only be assumed so. It is not impossible that greater fragmentation of the profession might serve better than complete integration. And where to stop in integration? With registration? With the bachelor of science degree from accredited colleges? Should the physical

November 14, 1955

sciences be included? Chemists? Physicists? All of these professionals are the same general type of person with the same general background of education and ideals of service. Down to what level should technicians ("affiliates") be included? Technical institute graduates with B.S. degrees? With "associate" degrees? Land surveyors may be registered in some states; draftsmen may belong to AIEE as affiliates, as may technical institute graduates.

We know only that there seems to be pressure from some AIEE members for the Institute to move toward unity; that a solid majority of the members want AIEE to emphasize technical affairs which could mean, by inference, that the so-called professional affairs be assigned to other bodies.

We also know from ECPD work that the trend of thought of the "working professors" (i.e.--those who donate their services to inspections and accreditation) seems to be toward consolidation of curricula into four major disciplines: chemical, civil, electrical, and mechanical. (This letter dodges the difficult problems of "cognate" curricula; the difference between chemists and chemical engineers; the petroleum - metallurgy-geology problems of the miners; the development of "nuclear engineering"; the difference between physicists and engineering physicists; and the like.) Certainly, sheer numbers of demand and supply of engineers would weight heavily any such concept. In any event, there seems to be a concrete urge toward more unity within the profession no matter from which angle it is viewed.

Let us assume then that greater unity is a desirable thing.

The diverse influences are obviously too great to achieve unity by anything like a papal bull even if there were an engineering pope to issue it. No administrative officer or staff member should ever be expected to preside at the dissolution of his own beloved outfit. EJC, now expanding to cover every possible grouping of engineers, has felt that a federation is the only acceptable overriding body. NSPE has often expressed the opinion that no overriding body is necessary; that each individual engineer should belong to one body built on geographical lines as well as to the society which represents his own segment of technical activity. The Morton plan, by the way,

November 14, 1955

comes closest to the desire of AIEE membership as expressed by vote several years back (Plan C).

No one has as yet made the obvious suggestion that each discipline do its own unifying first. This really is now in effect in ECPD where members of different persuasions of the same discipline are actively recruited for specialized work. I am sure each AIEE member of any team feels he actively represents IRE or IES if any item of particular interest should arise. The same is true of the divisions within mechanical engineering and probably the others. ECPD has proved itself a workable and a working body; and although I have personally been an active proponent of EJC expansion, I worry about its eventual unwieldiness. Perhaps the Morton scheme would be even more attractive if there were smaller numbers involved.

If unity is desirable, and if federations are a convenient first step, a reasonable move would be to suggest that the civils form a federation with the consulting engineers, sanitary engineers, and even with the NSPE since the governing board of NSPE is largely civils; that the mechanicals include the airplane, the automobile, the refrigeration, the ventilation, and the industrial engineer; the electricals, IRE and IES; the miners and chemical engineers federate in petroleum and metallurgy, with perhaps the structural work of the miners federating with the appropriate branch of the civils. Such arrangements as these would of course have to come into being by natural growth and not by artificial arrangement. Mention of them really has no place in this letter except insofar as they give background for help in the development of policies within AIEE.

Now to come to the development of Practices or Policies within AIEE.

Practices:

1. Support to the fullest extent possible the development of EJC with or without "reforms."
2. Actively support NSPE in its effort to enroll all engineers. Offer reciprocity in inducements to join both societies. Not as far as making enrollment in one society dependent upon prior enrollment in the other, but in that direction.
3. Attempt to keep EJC and ECPD independent councils,--

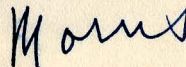
November 14, 1955

allied if thought desirable, but independent of each other. EJC to grow so as to be all-blanketing, ECPD to represent the major disciplines.

4. Persuade NSPE and IRE to join EJC.
5. Persuade NSPE and IRE to forego joining ECPD. In its place offer an alliance to NSPE as in (2) and to IRE as in (6).
6. Offer IRE our intense cooperation in obtaining ECPD positions for personnel suggested by IRE.
7. In the light of the present development of EJC, consider sponsoring IES as a member body.
8. Initiate preliminary discussion with IRE, IES, NEC, APC, and perhaps the engineering sections of EEI, NEMA, and RTVMA as to the advisability of forming an electrical engineering alliance.
9. Initiate discussion with the other founder societies as to how the major disciplines can best combine their efforts toward technical advances.
10. Publish to all who will listen that AIEE is ready, able, and willing to work with any or all of them toward further unification of the profession in all fields which it controls or to which it contributes. This about covers all of them.

In closing this rather long letter, I think I have developed within myself a feeling that if AIEE does not number itself among the leaders of the march toward unity, the idea of unification of the profession might well be dropped.

Yours very truly,



M. D. Hooven

MDH:MS