



American Institute of Electrical Engineers,

95 LIBERTY STREET, NEW YORK.

APPLICATION FOR TRANSFER FROM ASSOCIATE TO FULL MEMBERSHIP.

Extracts from the Constitution, as Amended May 21st, 1901.

ARTICLE II. MEMBERSHIP.

1. The corporate members of the INSTITUTE shall be designated as Members and Associates. Members and Associates shall be equally entitled to all of the rights and privileges of the INSTITUTE, except eligibility to the offices of President and Vice-President, which shall be limited to Members; and Members only shall be entitled to a diploma. There shall also be Honorary Members, who shall be entitled to all the rights and privileges of the INSTITUTE, except the right to vote for officers and hold office.

2. A Member shall have been an Associate, and at the time of his transfer to membership he shall be not less than twenty-seven years of age, and shall be:

- A Professional Electrical Engineer; or
- A Professor of Electrical Engineering; or
- A person who has done important original work of recognized value to electrical science.

3. To be eligible to membership as a professional Electrical Engineer, the applicant shall have been in the active practice of his profession for at least five years; he shall have had responsible charge of work for at least two years, and shall be qualified to design as well as direct electrical engineering works. Graduation from a School of Engineering of recognized standing shall be considered the equivalent of one year's active practice.

4. To be eligible to membership as Professor of Electrical Engineering, the applicant shall have been in responsible charge of a course of Electrical Engineering at a college or technical school of recognized standing, for a period of at least two years.

5. An Associate shall be a person who is interested in or connected with the study or application of electricity.

ARTICLE III.

3. An application for transfer from the grade of Associate to that of Member shall be made in a form prescribed by the Board of Directors, and shall embody a full record of the general technical education of the candidate and of his professional career. It shall be signed by the applicant, and shall refer to at least five members by whom he is personally known. Each of these references shall be requested by the Secretary to fill out a prescribed confidential form, to be addressed to the Board of Directors. No such application for transfer shall be considered until at least five favorable replies have been received. The Board of Directors, or the Board of Examiners, in the event of failure of replies, or receipt of unfavorable replies, may call upon the applicant to furnish additional names. Should an applicant for transfer certify that he is not personally known by five members, the Board of Examiners may accept references for the deficiency, to professional engineers of standing.

ARTICLE IV. DUES.

1. The entrance fee, payable on admission to the INSTITUTE, shall be five (5) dollars. A fee of ten (10) dollars shall be paid on transfer to the grade of Member, which shall include the fee for a diploma.

2. The annual dues shall be fifteen (15) dollars for members and ten (10) dollars for Associates.

3. The annual dues of Members and Associates residing in foreign countries other than Canada and Mexico, shall be ten (10) and five (5) dollars, respectively.

SPECIAL INSTRUCTIONS TO APPLICANT.

Statements of fact responsive to the following inquiries, are desired for the information of the Board of Directors and Board of Examiners.

These statements may be required to be verified by the oath of the applicant.

When required to give references to "Professional Engineers of Standing," preference should be given to full members of the American Institute of Civil Engineers, the American Society of Mechanical Engineers, American Institute of Mining Engineers, the Society of Naval Architects and Marine Engineers, the Canadian Society of Civil Engineers, all of America, or the Institution of Civil Engineers, the Institution of Mechanical Engineers, and the Institution of Electrical Engineers of Great Britain.

- What is your full name? Give date and place of birth.
- Please state under which one or more of clauses *a*, *b*, *c* of Section 2 Article II, quoted above, in your opinion, you are eligible for transfer to membership.
- What is your general and technical education; where and how acquired?
- (a) State in full the nature of the work done by you as a professional electrical engineer, during a period of five years or more, noting especially the work of which you have had responsible charge. Or,
(b) State in what college or technical school of recognized standing you have had responsible charge for two years or more of a course of electrical engineering. Or,
(c) State fully, instances of important original work of recognized value to electrical science which you have done.

State fully any facts you may deem likely to assist in determining the question or questions here under inquiry.

Present Address 31 Lyndhurst Road, Hampstead, London. Eng.

Occupation Electrical Constructor

REFERENCES.

See Article III. Section 3.

As references occasionally fail to reply to inquiries, thus delaying action, applicants are requested to send names of more than five full members if possible.

✓ J. W. Lieb, Jr. 55 Duane St.

✓ S. S. Wheeler Ampere St.

J. Van Vleck

✓ Jos. Wetzler 240 W. 23 St.

✓ W. D. Weaver 114 Liberty St.

✓ W. J. Hammer 26 Cortlandt St.

R. W. Pope 95 Liberty St.

1. Sebastian Ziani de Ferranti

Born April 9th 1864 at Liverpool, England.

2. Clauses a and c.

3. Electrical Engineer, University College London
and own study and research.

4. In 1882 I developed a new Alternating Current Generator which in those days was much more powerful and much smaller for its output

than anything then constructed, besides being an entirely mechanical construction as opposed to the wire wound machines then in general use.

In 1883 I introduced the solid strip winding of field magnets for alternators now generally adopted on the revolving fields of large generators. In 1886 I invented and carried into commercial use on a large scale a complete system of high

tension alternating current generation, together with all the details of mains, transformers, and switchgear for high tension

distribution. This system was put to work on the North side of the Thames in London, and covered a large and important area.

During the next few years I installed in this country and on the Continent of Europe a large number of high tension Alternating

Current central stations upon the same system.

In 1888 I first constructed 10,000 volt transformers for commercial purposes and started the building of the Deptford central station, which commenced supplying London with current

generated at Deptford at 10,000 volts and transmitted through

underground mains to various distributing stations. I invented designed and constructed all the apparatus necessary for carrying out this system. The system as then started with 10,000 volts and with the original machinery and much of the original mains has now been running for the last sixteen years and has formed the guide upon which the large generating stations and systems of distribution of the present day have been modelled. The original machines generating 10,000 volts without the intervention of transformers, were of 1,000 kilowatts capacity, which was many times greater in size than anything produced in 1888.

Since the starting of the Deptford station I have designed and constructed a large amount of electrical apparatus which is in use all over the world.

July 14th/00
S. Z. de Ferranti.