Form 158 1000-4-41

P3

Received April 5, 1943 Acknowledged April 16, 1943

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS

RECORD OF APPLICATION FOR

TRANSFER TO THE GRADE OF FELLOW

No. 8982

Name John Elmer Housley, District Power Manager, 4313

Address Aluminum Company of America,

Alcoa, Tennessee.

References	Grade	Communicated With	Second Request	Replies Received
E.E. George	Fellow	April 20, 1943		MAY 3 - 1943
C.A. Perkins	"	"		APR 26 1943
P.B. Juhnke	"	"		APR 26 1943
D.K. Marti	"	"		MAY 3 - 1943
H.G. Harvey	"	"		APR 26 1943

Action by Board of Examiners Recommended Date May 20, 1943

Action by Board of Directors Date AUG 4 - 1943

Posted in June ELECTRICAL ENGINEERING

Form 137-1M-12-35 Received..... No. 8982

Dues Paid

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS

33 WEST 39TH STREET, NEW YORK, N. Y.

A. I. E. E. APR 5 1943 NEW YORK

APPLICATION FOR TRANSFER TO THE GRADE OF FELLOW.

QUALIFICATIONS FOR TRANSFER.

The qualifications for transfer to the grade of Fellow are set forth in Article II, Section 4, of the Constitution, which is printed on the last page of this form. Applicants are urged to read these extracts carefully in order that they may have a perfect knowledge of the constitutional requirements.

Applicant's name ..... John Elmer Housley 44313

Present title or occupation ..... District Power Manager .....

Business address ..... Aluminum Company of America, Alcoa, Tennessee. .....

TRANSFER FEES AND DUES.

Transfer fee from the grade of Associate to that of Fellow, Ten (10) dollars.
Transfer fee from the grade of Member to that of Fellow, Five (5) dollars.
The annual dues for the grade of Fellow are Twenty (20) dollars.

REFERENCES.

Sec. 10 (Constitution). Applicants shall give references as follows:
For the grade of Fellow, to five Fellows.

Should an applicant for the grade of Fellow, either for direct admission or for transfer, certify that he is not personally known by five Fellows, the Board of Examiners may accept, for the deficiency, references to five professional engineers of standing. (This clause has been interpreted to apply only to applicants whose location or conditions of work are such that it is unreasonable to expect them to make reference to members of the institute.)

References should be selected who have personal knowledge of the applicant's engineering experience.

As references occasionally fail to reply promptly to inquiries, it is suggested that applicants furnish more than the required number of names.

REFERENCES.

F E. E. George 5004-U-St.	~~727 Pyramid Bldg.~~, Little Rock, Ark.
F Charles A. Perkins, 1715 West Clinch Avenue, Knoxville, Tennessee	
F Paul B. Juhnke, 72 West Adams Street, Chicago, Illinois	
F O. K. Marti, Allis-Chalmers Mfg. Company, Milwaukee, Wisconsin.	
F H. G. Harvey, 426 Marietta Street, NC&M Co	Atlanta, Georgia

Member 6/29/39

The following information is required by the Board of Examiners. Failure to give details will delay action on the application.

The applicant should state under which clause or clauses, a, b, c, d, of Section 4, Article II, of the Constitution, application is made, and give a full record of professional career, with particular reference to the period of responsible charge or the experience upon which the application is based.

APPLICANT'S RECORD

(Typewritten copy preferred)

1. Name John Elmer Housley (give in full)

2. Present occupation District Power Manager, Aluminum Company of America, (title, and name of concern)

3. Business address Alcoa, Tennessee

4. Date and place of birth January 9, 1893; Knoxville, Tennessee

5. Constitutional clause a & d. Section 4, Article II. (see paragraph above)

6. General and technical education Knoxville, Tennessee, Grade, Grammer and High School (1911) University of Tennessee B.S. in Elec. Eng. 1915.

7. Other Technical Society affiliations (give grade) Knoxville Technical Society, Member.

8. Record of professional experience

Dates here	Applicant's Record (continued)

Signed John Elmer Housley

Dated March 30, 1943

NOTE: The Applicant's personal signature, in ink, must appear at the end of this record.

If not sufficient space, the record may be continued on separate sheets of this size.

Form 216 500 8-38

American Institute of Electrical Engineers

33 West 39th Street New York, N. Y.

PROPOSAL FOR FELLOW

H. H. Henline, *National Secretary*

Dear Sir:

The undersigned hereby propose for advancement to Fellow grade

Mr. J. Elmer Housley
(Name)

Aluminum Company of America
(Address)

Alcoa, Tennessee

He is applying under clause(s) (a) (b) (d) and the regular transfer form containing a detailed statement of professional record and list of five Fellow references is attached.

Yours truly,

Signatures of five Fellows or Members

F 1. Charles A Perkins

M 2. Raymond A. Hopkins

M 3. Stanley Stevens

M 4. Kenneth E. Hapgood.

M 5. John D. Harper

Date March 20, 1943

Record of Professional Experience:

June 1915 – Jan. 1917: Apprentice Electrical Engineer, Aluminum Ore Company, East St. Louis, Illinois.

Jan. 1917 – Jan. 1921: Head Electrical Engineer, Aluminum Ore Company, East St. Louis, Illinois.

Responsible charge of all design work for plant expansion to four times the 1916 size of plant. Increased number of motor drives from 400 to 1200, maximum installed horsepower 25,000. In charge of expansion of generating and distribution features of steam plant using maximum of 18 cars of coal per day.

Responsible charge of all electrical repair, maintenance and construction at the Alumina Plant, Radium Coal Mine (1200 tons per day), Fluorspar Mine in Kentucky, Docks and Terminals at East St. Louis and Bauxippi, Arkansas, (near Memphis, Tennessee), also three river tow boats.

Jan. 1921 – Jan. 1922: Assistant Power Superintendent, Aluminum Ore Company, East St. Louis, Illinois.

Responsible charge of operation of steam plant. Also in charge of electrical design, repair and maintenance at Alumina Plant and other plants enumerated.

Jan. 1922 – Jan. 1923: Electrical Sales Engineer, Aluminum Company of America, Kansas City, Missouri, covering seven states.

Jan. 1923 – Jan. 1924: Responsible charge of reconstruction program in electrical distribution and power generation facilities at Aluminum Ore Company, East St. Louis, Illinois.

Jan. 1924 – April 1927: Assistant District Electrical Superintendent, Aluminum Company of America, Alcoa, Tennessee.

Responsible charge of new installations, operation and maintenance of hydroelectric system. The system included three 20,000 KVA generators and one 154,000 volt transmission line and substation. The latter included a 40,000 KVA interconnection with a public utility.

Had responsible charge of installation of fourth 20,000 KVA hydroelectric unit and design and construction of a second 154,000 volt circuit, 25 miles long. Also changes and additions to receiving substation at Alcoa Reduction Plant.

April 1927
March 1943

Superintendent of Power, Aluminum Company of America, Alcoa, Tennessee.

Responsible charge of generation, transmission and substations.

List of Plants added:

Santeetlah, near Tapoco, North Carolina, Carolina Aluminum Company, completed early 1928.
Two 25,000 KVA generators, 660 foot head.

Calderwood, Calderwood, Tennessee, Aluminum Company of America, completed early 1930. Original installation two 45,000 KVA generators, 215 foot head.

Construction:

Responsible charge of design and construction of five miles of double circuit, 154,000 volt, 500,000 c.m. A.C.S.R. transmission line between Cheoah and Santeetlah Plants, 1927.

Responsible charge reconstruction of Alcoa terminal substation 154,000 volts from 126,000 KVA in 1936 to 562,000 KVA in 1942. Served by six 154,000 volt circuits. One of the largest substations in the world. Ring type high side bus and sectional low tension bus design represents contribution to the art.

Responsible charge of installation of third 45,000 KVA hydroelectric unit at Calderwood Plant in 1937.

Negotiation and supervision of contracts with neighboring power systems since 1924. Present contracts involve from 1 to 2,000,000,000 kw-hrs annually. Company generation about same amount.

March 1943

District Power Manager, Aluminum Company of America, Alcoa, Tennessee.

AUTHOR:

1921
1943

Contributions to technical literature including Transactions of A.I.E.E. number about 140. They cover a range of inventions, improvements and contributions to the art in a wide variety of electrical subjects such as:

Steam Plant Operation. Industrial Power application design improvements. Hydroelectric power plant design, invention and improvement. High tension transmission lines covering improvements in construction methods. Lightning research on 154,000 volt steel tower transmission line 1928 & 29. (A.I.E.E. paper). Development of method of treatment of electrical insulating oil and electrical machinery lubricating oils which permits indefinite use of oil without sludging (A.I.E.E. paper). Development of improved air dehydration equipment for transformers, oil storage tanks and air blast circuit breakers. Installation and improvement of equipment for 210,000 KW capacity of mercury arc rectifiers in electrolytic reduction of aluminum (A.I.E.E. paper).

Installation of new inventions for telemetering load control for tie lines between interconnected systems. New types of measuring equipment for kilowatt-hours involving 50,000 ampere d.c. circuits. (Not available for publication).

Institute Activities:

1919 Associate Member American Institute of Electrical Engrs.

1939 Member American Institute of Electrical Engineers.

1938-9 Chairman East Tennessee Section, American Institute of Electrical Engineers.

1939-43 Member A.I.E.E. Committee, Electrochemistry and Electrometallurgy.

1942-43 Member A.I.E.E. Sub-committee, Electric Arc Furnace Transformer Standardization.

1942-43 Member A.I.E.E. Committee, Industrial Power Applications.

1941-43 Vice President American Institute of Electrical Engineers, Southern District No. 4.