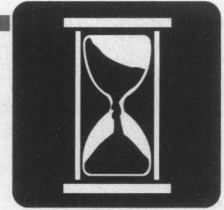


# History

and reflections on the way things were



## Kunihiko Iwadare: Edison Apprentice and NEC Cofounder

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Thomas Edison's fame skyrocketed throughout the world after his invention of the incandescent lamp. The attraction to this leading practitioner of the new electrical art was so great that would-be electrical engineers came from overseas as well as locally to work for Edison. So it was with Iwadare from Japan. He wrote later, in a brief biography of his life, "I left Yokohama for New York in June 1886, and arrived in New York early in July. I took a letter of introduction to Mr. Charles Bachelor in the [Edison] shop of Goerck Street from a friend of mine working in Messers. Frazer & Company, Yokohama, who were then the sole agents for the Empire of Japan for Edison dynamos, lamps, and supplies. I was admitted at once to the Testing Room, where Messers. Robert T. Lozier and Henry Stephenson helped me a great deal in getting along. In January, 1887, I was admitted to the Edison Machine Works, Schenectady, New York.

"During October of that year, I went on 2 weeks vacation to New York [City], where I met a man from Osaka, Japan, who was looking for an engineer for the Osaka Electrical Light Company, just being started. ... Seeing that the Tokyo Electric Light Company, already started, was acting as subagents for the Edison products under Messers. Frazer & Company, in addition to their lighting business, the Osaka Company wanted to be put in a similar position, enabling them to compete against the Tokyo Company. Under the circumstances, I suggested to the Osaka man that they adopt the alternating current system at the time" [1].

This put Iwadare at immediate odds with the Edison interests. Edison strongly favored direct current over alternating, and there were some who urged Edison to fire Iwadare. But Edison was reluctant without proof, and so Iwadare did not leave the Schenectady Works until March 1888, and then of his own volition. He had received a letter from the Osaka company

representative promising employment. "He added in the letter that he had negotiated with Westinghouse, Church, Kerr, and Company to secure their sole agency in Japan for the Osaka company, but that he had not been entirely unsuccessful. For a time, I did not know what to do, but, due to the suggestion of a friend of mine, I called upon the Thomson-Houston Company in Boston, and, when I found they were manufacturing alternating current as well as direct current dynamos in addition to arc dynamos, I felt relieved" [1]. Iwadare joined the Osaka Electric Light Company and oversaw their first installation of two 500 lamp alternators, starting in May 1889.

Iwadare returned to the United States to see the World's Columbian Exposition. "During 1892-1893, I crossed the Pacific to see the Chicago Exposition and found that the amalgamation of Edison Company and Thomson-Houston Company had been effected under the name of the General Electric Company. Then the question of the territory in Japan to be assigned to the sole agents of the former Edison Company and Thomson-Houston Company was discussed in New York and settled. ... Due to a difference of interpretation of the contract between the General Electric



Kunihiko Iwadare, cofounder of Nippon Electric Company

Company and the Osaka Electric Light Company [Osaka Dento Co.], I severed my connection with the Osaka company in March of 1895. Then I started the business of selling lighting and power machines and supplies on my own account, and, during the next year, I added to the list of my merchandise telephone switchboards, substation sets, and different devices, manufactured by the Bell Telephone Manufacturing Company [Western Electric], Antwerp" [1].

"In October 1898, I started the Nippon Electric Company [NEC] as a limited partnership with a friend of mine in Tokyo, which was reorganized in July 1899, as the present Nippon Electric Company with the capital of 200,000 yen, the shareholders being the Western Electric Company (then of Chicago) and half a dozen Japanese" [1]. Western Electric held 54% of the stock, the deal being concluded by Harry Thayer, manager of the New York operations, later to become president of Western Electric and of the American Telephone and Telegraph Company.

Kunihiko Iwadare was born on 15 August 1857 in the city of Kokura, Fukuoka Prefecture, Kinshiu, Japan, second son of Syuzou Kitamura. He was a follower of the Lord Ogasawara. Syuzou was active in the end of the feudal age. Later he was killed by his comrade. Kunihiko inherited his father's former name, Iwadare. Kunihiko and his elder brother Kanji Kitamura once thought of revenge, but decided to withhold. Instead they studied Western technology at the Imperial College of Engineering [Tokyo] [2]. All classes were conducted in English. He graduated with a degree in M.E. in June 1882, worked as a telegraph engineer for the government until June 1886, when he left for the United States.

## References

- [1] Vita written by Iwadare about 1930, File W-15852, Hall of Electrical History, Schenectady Museum Association, Schenectady, New York.
- [2] Michiko Yoshioka, *Young Days of Kunihiko Iwadare*, File W-15889, Hall of Electrical History, Schenectady Museum Association, Schenectady, NY, 1997. (Manuscript prepared after researching her grandfather. Partly in Japanese)