

A BRIEF HISTORY OF THE VSI GENERATOR

Galaktion E. Nickoladze was born March 23, 1879 in Kuttaiss, Georgia. As a child, Galaktion was a mathematical genius and



Galaktion E. Nickoladze - Kuttaiss, Georgia

was solving complex calculus and geometric problems in grade school. He received a formal education at the University of Heidelberg, Germany and a Degree in Electrical Engineering.



Galaktion E. Nickoladze

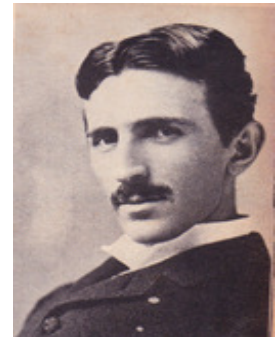
While in Europe, Galaktion Nickoladze attended a Nicola Tesla lecture. Nicola Tesla, known as the “inventor of the Alternate Current Generator”, made an extraordinary impression on Galaktion. Galaktion devoted himself to learning more about Tesla’s

inventions, particularly those relating to electromechanical machines.

While Tesla was working on his inventions in the United States, Galaktion was designing and building steam and hydroelectric AC power plants throughout Europe and China. Galaktion Nickoladze and Nicola Tesla were both extraordinary engineers who shared the vision for a better earth through the utilization of technology.

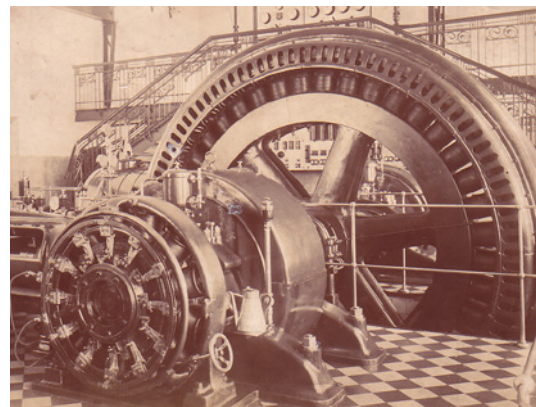


Galaktion Nickoladze



Nicola Tesla

Galaktion’s field of expertise was in designing and building electric power plants. He designed and built the first power plants in Siberia and China.



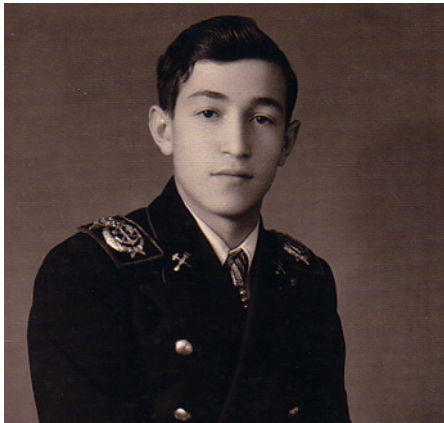
Power Plant - Harbin, China

Galaktion’s son, Leonovich Galaktion Nicoladze, was born in Siberia, Russia February 5, 1918. After Leo was born, Galaktion was contracted to build a power plant in China and the Nicoladze family moved from Siberia, Russia to Harbin, China. Leo, under the guidance of his father, immersed himself in the field of science, electricity, physics and mathematics. Like Galaktion, he was one of the few men who could visualize in his mind how electricity

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worked. Leo graduated with honors from the Harbin Polytechnical Institute in Harbin, China in 1938 with a degree in Electrical Engineering.

Leo received a Bachelor's Degree in Electrical Engineering (BS) from the University of California, College of Engineering, Berkeley, in 1949. For his college thesis, he used a theory his father Galaktion discussed with him in his youth, namely a "variable speed isosynchronous generator".



Leo G. Nickoladze - Harbin, China

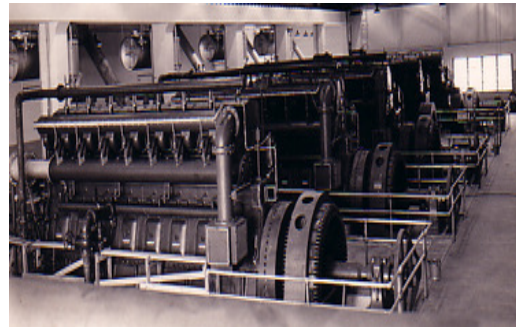
Galaktion's theory for such a machine was not referenced in a text book or engineering manual because it was unknown and encompassed a unique concept for an uncharted territory in the field of physics and electricity. Galaktion's theory claimed an impossible phenomenon for electromechanical physics. Leo proved Galaktion's idea with mathematical calculations, but it received little notice by his university professors and other electrical engineers, who dismissed it as an "impossible dream". This did not discourage him, it only delayed him.



Leo G. Nickoladze - South Pacific

After graduation, Leo pursued his career as an electrical engineer specializing in the design

and construction of conventional power plants.



Power Plant - South Pacific

For fifty more years Leo pursued his career as electrical engineer in the United States and abroad. His resume includes the design and construction of electric power plants throughout the South Pacific, Philippines, Saudi Arabia, Canada and Hawaii.

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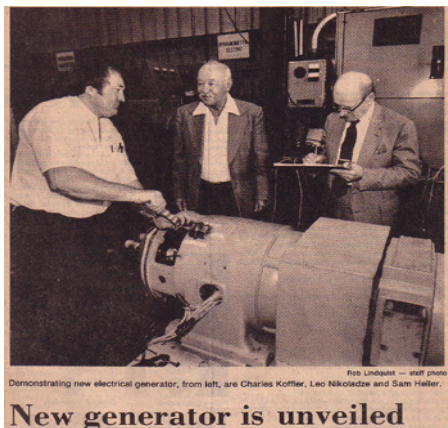
Leo G. Nickoladze - Honolulu Hawaii

Over the years, Leo G. Nickoladze and the charitable foundation that he founded "Foundation GNI", has been issued several U.S. patents, and foreign patents for the VSI Generator technology. All patents and propriety technology are the property of the Foundation GNI. The patent law firm is:

Arent Fox LLP,
555 West Fifth Street
48th Floor
Los Angeles, CA 90013 (213) 443-7604

In 1980, the engineering and development of the VSI Generator technology was initiated. Prototype machines were designed, fabricated and tested.

In 1985, the first public demonstration of the VSI Generator was held at California Electric Co., in Oakland, California.



VSI Generator - California Electric Co.

In 1989 Leo suffered a stroke and entrusted the responsibility to continue the development of the VSI Generator technology to his Godson and protege George A. Theofanis.



George A. Theofanis - Kailua, Hawaii

George A. Theofanis has continued with the engineering and development of the VSI Generator technology. In 2000, VSI Generator was issued U.S. Patent #6,072,303. In 2004 Variable Speed Generator Corporation was founded and presently holds the master license for the VSI Generator technology for North and South America. In 2006, VSGC formed Sustainable Energy Systems LLC, a energy research and development company located in Kailua, Hawaii. SES consists of a team of dedicated engineers specializing in generator and motor design, systems and equipment testing and product development. SES is developing renewable and green energy systems that utilize the VSI Generator technology.

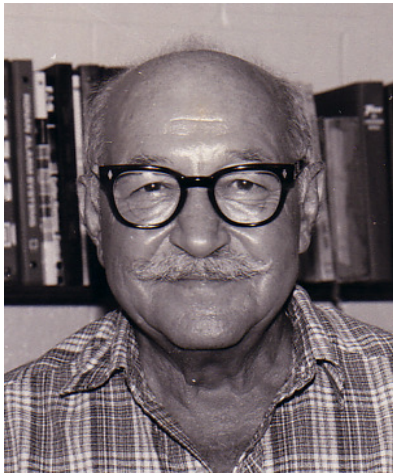
SES has completed the initial testing of the 100KW VSI Generator. Improvements were made in the efficiency and the speed range has been extended as well as the kilowatt output. The VSI Generator has been certified by a National Test Laboratory, "Advanced Energy", located on the Duke University campus in Raleigh, North Carolina.

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Biomethane VSGenset - Ogden, Utah

SES is presently beta testing a 100KW VSI Generator with a natural gas engine operating with the biomethane gas which is produced by an anaerobic digester system on a dairy farm located in Ogden, Utah. These test results are being utilized to optimize the design for the production model of the VSI Genset.



Leo G. Nickoladze - Kailua, Hawaii

On July 6, 1990, Leo G. Nickoladze passed away at his home in Kailua, Hawaii. Leo was always a visionary. From the inception, he foresaw the impact that the VSI Generator would someday have for the improvement of the environment and the future of the earth.