

IEEE MILESTONES IN ELECTRICAL ENGINEERING AND COMPUTING PROPOSAL FORM

Email to: Milestones Administrator
IEEE History Center
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Email: r.colburn@ieee.org

Answers to the following questions should be brief. If this proposal is accepted, then more complete information will be requested on a nomination form.

1. What is the name of the proposed Milestone?

Krka – Šibenik Electric Power System

2. What is the location of the proposed Milestone? In what IEEE Section does it reside?

Šibenik, Croatia

IEEE Croatia Section

3. What was the date of the work?

28 August 1895

4. What is the historical significance of the work (its technological, scientific, or social importance)?

It was the first AC electric power system in Croatia. Two generators (42 Hz, 550 kW each) and the transformers were produced by the Hungarian company Ganz. The transmission line from the power plant to the City of Šibenik was 11.5 kilometres long and the municipal distribution grid 3000/110V included six transforming stations. The system Supplied 340 street lights and some electrified houses in the town. Three years later after the first Jaruga power plant, the construction of the second Jaruga hydro plant began. Two three phase, 50 Hz, 5.5 MW generators were installed. A new transmission system was built and local grid enlarged.

The historical and social significance of the proposed milestone were presented at the 2007 History of Electro technology Conference in Newark, NJ.

5. What features set this work apart from similar achievements?

Ganz & Co had previously built an alternator in Rome Tivoli (A1) - a single-phase generator which remained in operation for a limited time. The Power Plant Jaruga 1 (in the Krka-Šibenik system) held Ganz's first multi-phase generator (A2). Furthermore, the Krka-Šibenik system was unique in many ways. Several Zipernowsky, Bláthy and Déri (who, at the time, all worked for Ganz) inventions were first used in Šibenik: ZBD transformers, Blathy watt-meters, etc. The transmission line was also quite interesting. Built on wooden poles it had 6 wires: 4 power conductors (double two-phase line) and a communication (telephone) line. As the power system was set to operation on the night of 28 August 1895, the telephone line (on the transmission poles) was used for communication between the "control centre" (Villa Meichsner) and the power plant.

Except for maintenance and several outages, the Krka-Šibenik Power System, operated from 1895 continuously. The Second power plant Jaruga 2 (which is still in operation today) and additional transmission lines were added to the system in 1903. The Jaruga 1 power plant was shut down in 1914 (as WWI begun), but the Krka-Šibenik system (at the time powered by two other power plants - Jaruga 2 and Manojlovac) remained in operation.

6. Describe briefly the intended site of the milestone plaque. Are the original buildings extant? Is the site secure and accessible to the public?

Only ruins of the first power plant (Jaruga I) exist today. But the the power plant built in 1903 (Jaruga II) is still in operation.

A memorial house („Šupuk House") devoted to Ante Šupuk, one of the builders of the first Krka electric power system, could also be a potential site for the plaque.

Both sites are secure and accessible to public.

7. Who is the present owner of the site?

Hrvatska elektroprivreda (Croatian National Power Utility) and Krka National Park

Dražen Šupuk, a direct descendant of Ante Šupuk, is the owner of the „Šupuk House“.

8. Is the owner of the site willing to have it designated as an Electrical Engineering Milestone?

Yes.

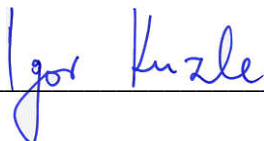
9. If you are not representing the IEEE Section where the plaque would be placed, have you asked that local Section if they would be interested in participating in nominating this achievement as an IEEE Milestone in Electrical Engineering and Computing?

We are representing the Section.

If yes, please specify the Section representative and have them sign below:

Name	Igor Kuzle
IEEE Section	Croatia
Position within Section	Section Chair
Email	i.kuzle@ieee.org

Signature _____



10. List the person(s) responsible within your organizational unit for preparing the formal milestone nomination and preparing the ceremonial events with publicity:

Name: Igor Kuzle
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